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OF
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Capital Structure.....

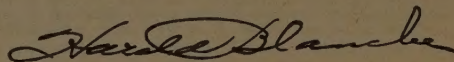
The Capital Structure of a company reflects the history and the rapidity of its growth. It may represent rapid development of earning power and improvement of its competitive position by the assumption of debt rather than by the more delayed method of retaining earnings over a long period of time for reinvestment. In simple language, this may mean the use of money rather than time. Sometimes it reflects, wholly or partially, fundamental changes in the market for capital funds affected by governmental fiscal and economic policies. Today a realistic concept of a balanced capital structure for growth companies is gradually being recognized.

The owners of common shares in growth companies are fortunate if their companies can obtain adequate sums of temporary capital; they profit from the use of low cost money. Owners of fixed price securities and contracts are penalized in inflationary times such as we are living in. But the holder of equities usually retains the true value, the purchasing power of his investment during inflationary periods.

To some people the copy-book rules of capital structure sometimes seem more important than a practical appraisal of growth potentialities. They hold that a company ideally should have only one class of securities, common shares. Of course, present tax laws penalize a company and its owners in such a condition, but that is beside the point. The ideal is clear--a simple capital structure is regarded as the ultimate desideratum for investment purposes.

We have been working out a practical capital structure designed to protect the interests of the investors, a capital structure with a broadening base of equity capital, a trunk of preferred capital which may later be incorporated into the equity base and a crown of temporary capital which will be repaid over a relatively short period of years. The keystone to this program is a sufficiency of earning power and an ability to meet the debt obligations at all times. We are consistently holding to this purpose, at the same time recognizing the necessity for ample working capital for a growth company in a dynamic but seasonal industry.

Our objective is to maintain our growth, increase our earnings, reduce our fixed obligations as much as possible and keep, at all times, adequate funds for the protection of the company and all the holders of its capital securities.



President

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The Analysts Journal

SECOND
QUARTER

1950

Message from the New National President

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UPON HIS BEING INFORMED of his father's election to the presidency of The National Federation of Financial Analysts Societies, a puzzled look appeared on my young son's face and he asked, "Daddy, what does that mean?" Yes, what does The National Federation of Financial Analysts Societies mean? As we begin our fourth year, I think it is only appropriate that we who claim to be analysts pause for a moment and analyze the structure we have created.

Pursuing good analytical procedure, let us first identify our Federation by the type of service or product offered. Then let us see if this service or product has been profitably distributed. Has it covered well its potential markets? Let us also determine whether the Federation has been alert in expanding its line of products or services. Finally, when we have completed our examination of the past and present status of the Federation, we will engage in a little forecasting.

We find that The National Federation was established as a service organization . . . a voluntary association of autonomous financial analysts societies, the aims of which were to exchange ideas and information, discuss mutual problems, and promote the welfare of the profession and its members. Indeed, these services appear to be worth while ones for which there should be a good market.

How well has this market been served? With the usual analyst's love for statistics, we submit the following: At the organizational meeting in 1947, four societies joined hands in forming the National Federation of Financial Analysts Societies. They and their approximate present membership follow:

Boston	220	New York	1,325
Chicago	160	Philadelphia	145

Providence, alone among the participants at the organizational meeting, has not yet become affiliated.

Since June 11, 1947, five additional analysts societies have become affiliated with the National Federation. They and their approximate present membership follow:

Detroit	35	Montreal	80
Los Angeles	30	St. Louis	40
San Francisco	60		

The present member societies include both the oldest—Chicago, founded in 1925—and the youngest—Montreal, formed late in 1949. The approximate total membership of the affiliated societies is now 2,100. From the standpoint of growth, we can consider this reasonably satisfactory progress.

Has the Federation covered the market well? We mentioned earlier that

(continued on following page)

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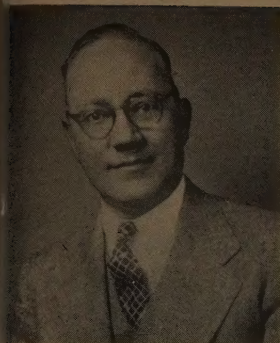
Providence has not become a member. We know also of an analysts group in Hartford as yet not affiliated. Both of these groups have been invited to come into the Federation, but for reasons peculiar to their structures have not as yet accepted. We sincerely hope that these two groups will one day appear on the National Federation's roster. At the present time, the Federation is assisting a security analyst in Pittsburgh to determine whether or not that city's analysts can be well served through the formations of a new society. The Federation will shortly meet with a group of analysts in Cleveland with the hope that it can be of assistance in bringing that city's analysts closer together in a formal society. There has also been indication of interest in forming an organization in Dallas.

Has the Federation expanded its services? Although progress has been slow and at times disheartening, we can say "yes" in at least two important directions. One of these—our annual convention—has certainly offered expanded services to members of affiliated societies and to their associates. The meeting on March 2, 1950, stands as a credit to Lucien Hooper, Jeremy Jenks, Helen Slade, Thomas Foristall, the forum chairmen, and to the many others who were instrumental in producing a program that drew the acclaim of the largest gathering of security analysts ever assembled. The other Federation activity that has been making definite headway is the Committee on Corporate Information under the chairmanship of Kennard Woodworth. He and his committee-men have had a number of meetings with corporation executives on the question of more adequate financial reports. There is every reason to believe that these friendly discussions will continue to operate to the benefit of our profession.

In summary, it appears that the Federation is making headway in the application of its services. The conception of this type of organization is a sound one, and continued progress is indicated. It must, however, be borne in mind that the quality of the services that the Federation can render to the profession and the speed with which services can be expanded will depend primarily upon the degree of interest and amount of work contributed by the affiliated societies. Yes, the Federation will progress, though very slowly, with the support of only a small nucleus of individuals. However, let us not be satisfied with this type of progress. As president, I urge all newly elected officers and directors to do all in their power to knit the affiliated societies they represent into a closely woven fabric for the benefit of analysts everywhere. To this end posts on the various committees have been, and will continue to be, spread as widely as possible among the members of all affiliated societies. This has not been done merely for the sake of regional representation; the members have been selected on the basis of qualifications and interest in the assignment.

The Federation faces a promising future in the service of our profession. Let us all work to make this promise come true.

George M. Hansen



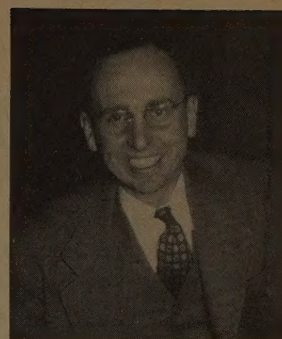
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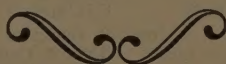
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Southwestern
Public Service
Company

Announces
ITS MEMBERSHIP IN THE
\$100,000,000 CLUB



The Company's gross assets passed the \$100,000,000 figure during the month of March 1950.

On August 31, 1945, upon completion of sale of all properties necessary to comply with orders of the S. E. C. under the Public Utility Holding Company Act, Company assets were about \$44,500,000.

Thus, in the period of 4½ years, following termination of the Second World War, assets increased over \$55,500,000 or 125%—an average of 28% per year.

Southwestern's management is naturally proud of this expansion record but recognizes, of course, that it must be attributed largely to the record-breaking growth of the territory served.

This growth has been and is on a sound and diversified basis, with every indication of its continuance in the foreseeable future, and with an increasing number of people realizing the advantage of this territory both as to business and good living.



Utility Forum

THURSDAY MORNING, MARCH 2, 1950

W TRUSLOW HYDE, JR., Josephthal & Company, presiding.

Chairman Hyde: There may be a few more people straggling in later, but we want to get started on time.

I want to introduce myself for the benefit of those who don't see me around all the time. I am Trus Hyde of Josephthal & Company.

It is indeed a pleasure to have the privilege of being chairman of the utility forum of this Annual Convention of the National Federation of Financial Analysts Societies. I want to welcome everybody here, particularly those from out of town. If there is anything that the New York members can do to make the stay of the out-of-towners more pleasant, it certainly will be our privilege to do it.

The entire Proceedings of the convention are going to be published in the next issue of the ANALYSTS JOURNAL. Members will get a copy, the usual subscription. Additional copies will be available for those who want them. I understand that the per issue price is \$1.25, but larger quantities will be available at reduced rates.

The President of the National Federation has said many times that, whenever two security analysts get together, you have an argument. So we are going to start off this morning with an argument. We are going to have a debate on one of the most discussed topics in financial circles today, the stability or instability of utility earnings.

Taking the affirmative, we have what I consider a real student of public utility operations and finances. I have known him, worked with him for many years, and I can assure you that anything he says is the result of a tremendous amount of careful, serious, and honest study.

Without any further hesitation, it is a great pleasure to introduce Charles Tatham, vice-president of Institutional Utility Service. (Applause.)

* * *

Mr. Charles Tatham, Jr.: In a basically unstable world any concept of stability must of necessity be relative. In a sense this may be considered an unfair approach on my part, because no one will deny the great *relative* stability of electrical utility earnings, compared with the earnings of industrial companies and the railroads.

Lest there be any lingering doubt on this point, let me comment on a chart that I have here. With 1929 as a base, that is, as 100%, the net income of 430 industrial companies declined to 1.4% in 1932, rose to 82.5% in 1937, fell to 43.0% in 1938, rose to 93.5% in 1941, declined to 78.6% in 1942, and subsequently rose to 211.7% in 1948.

The net income of class I railroads fell from 100% in 1929 to 15.0% in 1931, vanished completely (turned into deficits) during the next three years, rose to 18.4% in 1936, turned deficit again in 1938, rose to 100.5% in 1942, declined to 32% in 1946, and rose again to 78% in 1948.

Compared with these wild gyrations, the electrical utili-

ties have had a record of enviable stability. Net income declined from 100% in 1929 to 66.8% in 1934, and then rose with but minor fluctuations to 112.3% in 1946 and 115.7% in 1948. It is interesting to note that it was not until 1946 that the net income of either the industrials or the utilities surpassed the 1929 level and that the utilities' 1946 margin of gain was 12.1%, compared with 18.9% for the industrials.

At this point one might claim that my contention as to electrical utility earnings is proven and the argument is over.

STABILITY REFLECTS INHERENT CHARACTERISTICS

However, I would like to go further and try to show that this record of stability reflects certain inherent characteristics of the business and is not the result of a chance set of circumstances operating during this period. Moreover, since stability is only one element of interest to the common stock investor, I would like to present some data on earnings growth, which is a basic factor of protection to stability.

Both stability and growth are inherent characteristics of the economics of the industry.

If I may be permitted a simile, I would say that the earning power of the electrical utilities is like a captive balloon, tugging at the ropes which hold it chained to the ground. The ropes in this instance represent the regulatory restrictions, taking the form of rate reductions, and the ground represents the investment in facilities, or rate base.

You each have received a table of figures which presents for the electrical industry as a whole the pertinent data covering growth and stability from 1902 to date. This covers virtually the industry's entire history. No comprehensive statistics are available for the period before 1902.

STABILITY IN RATE OF RETURNS

In the first place you will notice the astonishing stability in the rate of return earned on the investment. This is shown in the fifth column in the upper left-hand corner. The return averaged 6.1% for the thirty-six-year period 1902-37, and it averaged 6.0% for the thirteen years 1937-49. During the latter period it has ranged narrowly between 5.6% and 6.7%.

In other words, the industry with remarkable consistency has earned year-in and year-out all that it has been permitted to earn. Regulation, which has substituted for competition, has held earnings tied down to a reasonable return on the investment; otherwise, they would have gone soaring off into the blue. In the absence of regulation the ceiling on earnings would be imposed by the economic value of the service. I don't have to point out to you how very much greater the value of electrical service is than its cost.

CONSISTENT UPWARD TREND OF REVENUE

Second, you will notice the consistent upward trend of revenue. In only three years since 1926 was this trend reversed; and then only to a very minor extent.

ELECTRIC UTILITY INDUSTRY

(1902 - 1949)
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SOURCE	YEAR	INVEST- MENT(A)	GROSS INCOME	% RETURN	SOURCE	YEAR	ELEC. OPER. REV.	% INCR.	OPER. INC. BEF. DEPR. & TAXES	% REV.	GROSS INCOME	% REV.
U.S.CENSUS (b)	1902	\$619	\$30	4.9%	U.S.CENSUS (b)	1912	\$276)		\$137	49.7%	\$116	42.0%
"	1907	1,035	69	6.7	"	1917	478)	245.0	222	46.4	179	37.4
"	1912	2,200	116	5.3	"	1922	953)		476	50.0	358	37.6
"	1917	3,076	178	5.8								
"	1922	4,702	395	7.1	E.E.I. (f)	1926	1,415		806	57.0	677	47.9
"	1927	11,135	772	6.9	"	1927	1,567	10.8	914	58.3	770	49.1
"	1932	14,630	893	6.1	"	1928	1,689	7.9	1,019	60.3	849	50.3
"	1937	14,416	849	5.9	"	1929	1,817	7.7	1,108	61.0	929	51.1
	AVERAGE			6.1	"	1930	1,894	4.2	1,171	61.9	979	51.6
F.P.C. (c)	1937	14,404	840	5.8	"	1931	1,874	-1.0	1,180	63.0	979	52.1
"	1938	14,570	821	5.6	"	1932	1,713	-8.5	1,095	63.9	879	51.2
"	1939	14,485	864	6.0	"	1933	1,640	-4.2	1,040	63.4	778	47.5
"	1940	14,583	873	6.0	"	1934	1,710	4.2	1,075	62.8	762	44.6
"	1941	14,557	836	5.7	"	1935	1,785	4.2	1,116	62.5	790	44.3
"	1942	14,412	802	5.6	"	1936	1,911	7.0	1,190	62.3	819	42.8
"	1943	14,187	817	5.8	"	1937	2,031	6.1	1,250	61.6	839	41.4
"	1944	13,881	842	6.1	F.P.C. (c)	1937	2,157	-	1,228	56.9	840	39.0
"	1945	13,208	887	6.7	"	1938	2,169	0.7	1,239	57.0	821	37.9
"	1946	13,351	891	6.7	"	1939	2,271	4.8	1,314	57.9	864	38.0
"	1947	14,117	883	6.2	"	1940	2,404	6.0	1,390	57.8	873	36.3
"	1948	15,720	896	5.7	"	1941	2,621	9.0	1,497	57.1	836	31.9
"	1949 (d)	17,100 (e)	1007	5.9	"	1942	2,760	5.1	1,578	57.1	802	29.1
	AVERAGE			6.0	"	1943	2,971	7.6	1,655	56.7	817	27.5
					"	1944	3,108	4.7	1,685	54.2	842	27.1
					"	1945	3,171	2.0	1,718	54.2	887	28.0
					"	1946	3,293	3.9	1,707	51.8	891	27.1
					"	1947	3,698	12.1	1,744	47.2	883	23.9
					"	1948	4,167	12.9	1,840	44.1	896	21.5
					"	1949 (d)	4,361	5.8	2,043	46.9	1,007	23.1
					AVERAGE				4.9	56.5	38.6	
					AVERAGE				6.3			
					(excl. 1931-33)							

PER KWH SOLD

YEAR	OPER. REV.	OPER EXP.	OPER. INC.	OPER. REV. PER \$1 OF INVEST.	NOTES:
1932	2.69¢	1.54¢	1.15¢	11.7¢	(A) REPRESENTED BY TOTAL CAPITALIZATION AND SURPLUS, EXCEPT THAT YEARS 1902-1927 REPRESENT TOTAL BONDS AND STOCK OUTSTANDING.
1938	2.15	1.40	0.75	13.8	(B) U.S. CENSUS FIGURES COVER THE ENTIRE ELECTRIC INDUSTRY CONTRIBUTING TO THE PUBLIC SUPPLY, BOTH PRIVATE COMPANIES AND MUNICIPAL PLANTS.
1940	1.92	1.29	0.63	15.6	(C) FED. PWR. COMM. FIGURES COVER THE PRIVATELY OWNED CLASS A AND B ELECTRIC UTILITIES, DEFINED AS THOSE WITH ANNUAL ELECTRIC REVENUE OF \$250,000 OR MORE. THESE COMPRISE IN EXCESS OF 98% OF THE PRIVATELY OWNED ELECTRIC LIGHT AND POWER INDUSTRY AND ARE STATED BY THE F.P.C. TO BE REPRESENTATIVE OF THE ELECTRIC INDUSTRY AS A WHOLE.
1942	1.64	1.21	0.43	18.1	(D) 12 MOS. TO NOV. 30.
1944	1.49	1.12	0.37	21.3	(E) ESTIMATED.
1946	1.64	1.23	0.41	23.4	(F) EDISON ELECTRIC INSTITUTE FIGURES COVER THE PRIVATELY OWNED ELECTRIC UTILITY COMPANIES ONLY.
1948	1.62	1.28	0.34	24.8	

NOTE:

THE DATA REPORTED BY THE DIFFERENT AGENCIES ARE NOT STRICTLY COMPARABLE, BUT ARE BELIEVED TO BE SUFFICIENTLY SO FOR THE PURPOSE OF RECORDING INDUSTRY TRENDS AND FINANCIAL RELATIONSHIPS. IN ANY EVENT, THEY ARE THE ONLY DATA AVAILABLE.

- (A) REPRESENTED BY TOTAL CAPITALIZATION AND SURPLUS, EXCEPT THAT YEARS 1902-1927 REPRESENT TOTAL BONDS AND STOCK OUTSTANDING.
- (B) U.S. CENSUS FIGURES COVER THE ENTIRE ELECTRIC INDUSTRY CONTRIBUTING TO THE PUBLIC SUPPLY, BOTH PRIVATE COMPANIES AND MUNICIPAL PLANTS.
- (C) FED. PWR. COMM. FIGURES COVER THE PRIVATELY OWNED CLASS A AND B ELECTRIC UTILITIES, DEFINED AS THOSE WITH ANNUAL ELECTRIC REVENUE OF \$250,000 OR MORE. THESE COMPRISE IN EXCESS OF 98% OF THE PRIVATELY OWNED ELECTRIC LIGHT AND POWER INDUSTRY AND ARE STATED BY THE F.P.C. TO BE REPRESENTATIVE OF THE ELECTRIC INDUSTRY AS A WHOLE.
- (D) 12 MOS. TO NOV. 30.
- (E) ESTIMATED.
- (F) EDISON ELECTRIC INSTITUTE FIGURES COVER THE PRIVATELY OWNED ELECTRIC UTILITY COMPANIES ONLY.

A significant economic characteristic of the industry, the increment cost factor, is revealed in the columns in the upper right-hand corner, relating operating profit (net operating income before depreciation and taxes) and gross income to revenue. The electrical industry is the perfect mass production business. The more you make, the lower the cost and the greater the profit. Once the investment is made to carry the peak load, any increase in output which improves the load factor results in rapidly declining unit costs and increasing profits.

CUSTOMERS ARE FIRST BENEFICIARY

In a competitive business field high profits bring in competing organizations, and profits are forced down. Under our system of public utility regulation, unduly high profits engender rate reductions, and the customers, the American public, have been the first beneficiary of the economic progress made by the industry. This, of course, is as it should be. The investor is paid for the hire of his capital and he cannot expect exorbitant monopoly profits.

This sequence of economic progress is indicated in the upper right-hand columns in the table of figures.

You will notice that the operating profit until 1947 showed a remarkably constant relationship to revenue, averaging about 57%. This was in spite of substantial rate reductions made with fairly continuing regularity. In other words, the benefit of operating economies (that would normally have increased profits) has been passed on to the consumer. A friend of mine with one of the utility companies estimated that, had it not been for rate reductions made during the ten years 1937-47, electrical operating revenue in 1947 would have been almost \$1 billion higher. If 60% of this were brought down to net, it would have increased net operating income by about 78% and the balance for common by more than 100%.

The industry's return on investment instead of being about 6.2% would have been about 10.5%.

Gross income, on the other hand, as a percentage of operating revenue, has shown a fairly persistent decline. Since the difference between gross income and operating profit is accounted for by depreciation and taxes, it follows that the increase in these two items has been almost wholly responsible for the failure of gross income (and earnings available for common stock) to parallel the upward trend in revenue.

This is important for this reason: the increase in taxes has reflected almost entirely higher Federal income taxes, and the increase in depreciation has resulted principally from changed accounting practices. It appears reasonable to believe that both these factors are now largely stabilized and thus will not continue to absorb in the future an *increasingly* large portion of revenue.

Still, you probably wonder how it is possible that 23% of revenue can today provide a fairly reasonable return on the investment, whereas it took 50% of revenue back in the '30's.

The answer is somewhat complicated, but one important clue is revealed in the table in the lower left-hand corner.

The effect of rate reductions is indicated in the decline in operating revenue per kilowatt-hour sold. The cost of making electricity has similarly declined on a per kilowatt-hour

basis. The profit on a unit of production basis has declined even more sharply.

Why has the return remained unimpaired?

It is explained, briefly, by the tremendous increase in the efficiency in the use of the investment. Operating revenue per dollar of investment has more than doubled since 1932. Thus, a smaller percentage of the increased revenue suffices to maintain the return on the investment.

So much for what *has* happened. The record should be reassuring to investors. The principal purpose in studying the past is to obtain information that may help us to gage the future.

The record shows that the electrical industry has successfully weathered depressions, wars, and inflation: that it has maintained an astonishing continuity of earning power through good times and bad.

Why should it continue to do so? To me seven of the most convincing reasons are:

1. Nothing is more vitally essential to the country's economic welfare than a physically well-developed and financially strong electric power industry.

2. There is a known potential demand for electrical service substantially greater than that presently being met.

3. This will insure a steady growth in output, sales, and revenue, as long as the country continues on an even keel.

4. The industry's record provides convincing evidence that expanding sales will be accompanied by an adequate profit margin.

5. In the event of a business depression, the decline in consumption of electricity should be substantially less than the decline in business activity.

6. This decline in consumption will come primarily in the low rate brackets of industrial use and will be largely offset by a comparable decline in operating expenses, principally cost of fuel.

7. In the event of further price inflation the record of the state regulatory commissions over the past couple of years should reassure investors on the question of obtaining rate increases whenever these prove necessary.

* * *

Chairman Hyde: Thank you, Charlie. I enjoyed that very much. It opened my eyes to a couple of things I might have overlooked.

On the other side, I was very careful to select a man who is one of the most careful thinkers in the analytical field today. He is an engineer as well as an analyst. His experience goes back far beyond most of ours here today. He knows the problems of the industry better than any man I have had the honor and pleasure to know.

I take great pleasure in introducing Mr. Hugh Pastoriza of Coffin & Burr. (*Applause*)

* * *

Mr. Hugh Pastoriza: I speak to you today with a feeling that I have been severely put upon by your program committee—that they have started me off with a heavy handicap. Not only have they put me on the unpopular side of this question, but also in the program they have labeled me as the "con" man. Obviously I must expect anything I may say to be received with skepticism.

I cannot dispute Mr. Tatham's conclusion that the utility

industry as a whole should show a high degree of stability in the future, so far as we can hope to see it. I cannot disagree because I know of no other industry widely available for investment that has made a better over-all showing.

My dissent, my disagreement with Mr. Tatham, does not arise from any ability to refute his figures—they are certainly as good as any available to me. I have to accept them as accurate. Nor can I dispute the conclusions he draws from them.

My entire argument is directed at the implication that, because the industry is unusually stable, all the individual units in it are also unusually stable. The point I want to make is that, even though, as Mr. Tatham has shown, the combined earnings of all utilities have shown remarkable stability, this does not justify the conclusion that all the utilities involved are also remarkably stable, nor even that any of them are. In other words, unless we are prepared to make an investment in all the units of the industry, the stability demonstrated by Mr. Tatham's figures may have no applicability to our problem.

Consider, for example, a population in which all the men were tall and all the women short. The average height would be normal, but there might not be a single individual who corresponded to this average.

As another example, it is easy to set up hypothetical series of earnings, with maxima and minima at different times, so that the sum would be absolutely constant, although the individual components would vary in value over a wide range. The power flow over a three-phase a-c circuit is a familiar example of this kind of mathematical phenomenon. The power flow through any one phase varies from zero to a maximum, but the sum of the power delivered by the three phases is constant.

This same situation exists to a degree, with Mr. Tatham's summation of utility earnings. During the boom and depression of twenty years ago different utilities experienced their maxima of earnings all the way from 1929 to 1931, and their minima from 1932 to 1935 or later. Under these circumstances, the stability of the aggregate figure is no measure at all of the stability of the components. The aggregate figure on gross corporate income showed a decline from boom to depression of 22% according to Mr. Tatham's figures. The corresponding figure on individual companies of which I have a record varied from 70% on the least stable to 1/2% on the most stable.

The historic evidence as to past earnings fluctuations is sufficient, in a number of cases, to throw doubt on the efficacy of our current factors of safety to protect against trouble in those cases.

The best route to an answer, to my mind, is to study the past record of earnings for the company under consideration and to derive a measure of the stability of those earnings. Then to study changes in all known factors affecting that stability and to assess their probable effect. From these considerations, some notion as to probable future stability can be drawn.

Over the past several years, I have pursued such investigations and have covered most of the important units in the industry. The results indicate that individual company performance may vary widely from that of the industry, as

shown in Mr. Tatham's table, and that certain companies present definite hazards.

The results of this study, as applied to the gross corporate income during the boom-depression period of twenty years ago, may be summarized as follows:

5% of the companies lost	53 % or more of gross corp. inc.
10	42½
20	37
30	32½
40	28
50 (median company)	26
60	23½
70	18½
80	15
90	10
100	½

A similar study, covering the postdepression period has not yet been completed. So far, results indicate that the magnitude of variation will average between 80 and 90% of the decline during the depression.

From this it would seem that we are apt to find declines or fluctuations of 25% or more in half the companies with which we are concerned.

EFFECT OF OPERATION RATIO

The foregoing figures reflect the effect on gross corporate income of variations in revenue and expenses, as experienced during the periods cited.

This effect will, of course, change with the operating ratio. During the depression period, this ratio was about 50%; during the postdepression period, it averaged 65%; now it is 75%.

The change in revenue to produce a 25% reduction in gross corporate income would be 12½% at 50% operating ratio, and only 6¼% at 75% operating ratio. The increase in expenses to produce the same effect would be 25% at 50% operating ratio and 8-1/3% at 75% operating ratio. This probably explains, at least in part, why the variations in the postdepression period are so close to the declines in the depression period. Clearly, the industry is much more sensitive to variations in revenue and expenses than it was in the past. One half the changes in revenue or one third the changes in expense experienced in the depression will produce the same effect in gross corporate income. The statistics of the past must be considered in the light of that fact.

EFFECT ON FLUCTUATIONS ON DEBT AND PREFERRED STOCK

Our factor of safety for interest on debt is generally expressed as coverage or "times interest earned." This is generally three times or more today, and such a factor would insure that interest was earned with any decline in gross corporate income not in excess of 66-2/3%. Only one company out of 144 showed that much decline in the depression.

The factor of safety for preferred stock is expressed as "times preferred dividend and prior charges earned" and this is generally held at two times or more. Such a factor would protect preferred dividends where gross corporate income declined not more than 50%. Less than 5% of the companies studied showed such a decline.

EFFECT OF FLUCTUATIONS ON COMMON STOCK EARNINGS

The fluctuations of common stock earnings corresponding to a drop of 25% in gross corporate income would, of course, vary from company to company, depending on the proportion of prior charges.

If we take an average case where such charges are 40% of gross corporate income, the 25% decline in gross corporate mentioned previously would result in a 42% decline in common stock earnings, leaving only 58% of former earnings for dividends.

If, in the same case, dividend payout were 75%, the dividend would not be fully earned after the decline, and a part of it would have to be paid out of surplus.

CONCLUSION

The foregoing discussion is intended to stress the idea that the unstable features of the utility picture are not negligible with a considerable body of companies.

Detailed studies show that many companies have manifested good stability in the past and on the record should be able to continue to earn their dividend through rough financial weather.

They also show that a considerable number have not been in this happy situation in the past and may not be in future.

In considering the common stocks of companies in this latter class, it is important to be sure that this extra risk is properly compensated for in the extra yield afforded.

* * *

Chairman Hyde: Hugh, that was a masterful job and a tough one.

Last summer, many of us received a voluminous questionnaire on the interpretation and use of various ratios and statistics in connection with the analysis of public utility securities.

At first, as we thumbed through it, it appeared to be a tremendously imposing questionnaire. At second glance, it was impressive, so impressive that most of us took many hours in thinking it over, filling it out, and returning it.

This questionnaire was the brain child of the executives of the General Public Utilities Corporation. The firm sent around the result of the poll to those who had co-operated and sent in their answers. The purpose, I think, was to find out just what analysts considered important and what they considered unimportant, so far as utility securities were concerned.

One of the officials of General Public Utilities has consented to go over these items with us today. I think he is going to give us a good lacing down for impractical methods that we use. He is going to show us, I hope, some fallacies that are all too general and too common. I know that whatever he does say will be of great help and value to everyone here, and it is with great pleasure that I introduce Mr. H. A. Busch, vice-president of General Public Utilities. (Applause)

* * *

Mr. H. A. Busch: Gentlemen, good morning. It is indeed my good fortune to have been invited to participate in this meeting this morning. The New York contingent of analysts have been asking me questions about General Public Utilities Corporation and its subsidiaries for some years, and I did not realize that they needed any help in thinking up

things to ask about. However, I find out that they brought up the reserves from Boston, Philadelphia, Chicago, and heaven knows from what other sections. Now, the subject assigned to me this morning is not the current affairs of GPU or its subsidiaries, but, if anyone here wants to ask a question on that subject, I'll take him on with no holds barred.

Now, let me tell you a bit about how we got started on the subject matter which I am supposed to tell you about this morning. We, in GPU, have a high regard for the security analysts and the part you play in the investment business. Now, I use the term "investment business" in its very broadest sense. We know that the great majority of security holders bought the securities they own on the advice or recommendations of a security dealer, investment adviser, or commercial banker. We also know that this advice or recommendation is based on an analysis of the security made by one of you fellows. Although it is true that, in the last analysis, investors probably make up their own minds on the purchase or sale of a security, the opinions you express and the recommendations you make have a great deal of influence on their final decisions. Your opinions and recommendations are widely circulated among investors. You are an important conduit for getting information to security holders.

BIG PROBLEM IS RAISING MONEY

During the quiet days of June 1949—let me say that a quiet day in our shop in 1949 was any day that we only had two financing programs underway—Al Tegen and I were talking about the various meetings of the utility associations that were to be held in the fall of 1949 and what could be done to really put some pep into the discussions of those meetings. The big problem in the utility business today is raising money. Of course, being in that end of the business, I have always thought it was the most important part, but a lot of operating people, being engineers, appliance salesmen, or what have you, did not always agree with this. Meetings of the associations for many years have been largely devoted to discussions and papers on engineering, load building, and customer relations. For the last few years, however, there has been more discussion of financing, particularly by the companies who no longer have Poppa to call on for equity contributions. We believed, therefore, that a program to focus the attention of the utility industry on those things that make for a favorable investor's attitude toward utility securities would be most helpful.

We always found you fellows such amiable people to meet and talk to, we were convinced you enjoyed your jobs; so, we decided to add a little more work to what you were already doing and, in that way, add a little more enjoyment to your life. We selected a sample of about 65 analysts, trust officers, and investment counselors, sent each a questionnaire containing about 25 questions, and asked the experts to express their opinions on many matters which we knew they would consider in analyzing the investment quality of a common stock of a utility. Now, some of the respondents are here today, but I want to assure them that no answers will be identified in a way that any of their trade secrets will be disclosed. Although we knew that questionnaires are subject to the interpretation the respondent

ents place on the questions asked, and, therefore, no questions would be settled for us with finality, we believed that the responses would be helpful to us and to others in the industry in many ways. We did not expect to find the respondents in agreement on all matters, as our experience with you has taught us that your opinions differ on the importance of certain matters. We asked several questions that would require an expression of opinion on various balance sheet ratios and, I am glad to say, found the answers often qualified in such a way as to indicate that the attitude of some regulatory agencies that a ratio good for one company must necessarily be good for all companies has not been universally adopted. The opinions expressed varied widely on some questions, and I will try to give you a quick summary of a few of them. I will also express my own views on some of the questions.

One question we asked had to do with the treatment accorded by the respondents of the amounts reported in account number 100.5. I don't suppose we could find many of you who could give us the number of many of the accounts in the uniform system of accounts, but everyone knows good old account 100.5. We framed the question this way: "If a utility's balance sheet reveals an excess of investment cost over original cost, and if such excess is being amortized against income, do you deduct such excess in your computations to determine the amount of equity for the common stock?" The respondents were about evenly divided on their answers to this question; 31 said they would deduct it, and 33 said they would not.

RESPONDENTS DIVIDED IN OPINION

Now the way I interpret these answers is that about half of the respondents believe that original cost, less depreciation, plus the usual working capital allowances, ultimately is going to be upheld as a determination of rate base for operating utilities. The other half believe that fair value is going to be the basis for determining rate base. I personally agree with the latter group. I believe that common sense will prevail in most commissions and that the utilities will be allowed to earn a reasonable return on fair value. I believe there is some evidence that commissions are beginning to realize that the utilities need a great deal of new capital and that it cannot be obtained at reasonable rates unless the earnings are forthcoming to support it. Executives in the industry have been hammering away at this with commissions for some time and should continue to do so. You should also remember that the courts in many jurisdictions still have the final determination of what is the proper rate base, and, although I do not like litigation, management should not, in my opinion, hesitate to take rate proceedings to court if necessary.

Let us look for a moment at how the respondents attempt to measure the adequacy of the depreciation reserve and the annual provision for depreciation. This is a subject on which more testimony has been given, more theory developed, and more bunk dispensed than on any other single item in utility accounts. We asked, "In analyzing a utility common stock, do you attempt to arrive at a judgment of the adequacy of the reserve for depreciation and the accrual therefor?" The answer was "yes" in almost 100% of the responses and rightly so. The annual accrual to the reserve

is a substantial item on the income statement, and the adequacy of the reserve and the accrual therefor should be carefully examined.

We also asked the respondents to indicate the basis they used in arriving at their judgment. About one third used comparisons with other companies as a basis. About one third used various judgment percentages applied to the plant account figures. The remainder used various methods which were a combination of the other two. Some indicated that all the older concepts of percentage to gross plant would soon have to be changed since the character of so many companies' plant accounts was changing rapidly as the expansion program went forward. A very large majority regarded the amount allowed for depreciation for Federal income taxes as significant in evaluating the annual accrual for depreciation.

NO EASY METHOD OF JUDGING ADEQUACY

I can offer you no easy method of judging the adequacy of the reserve or the accrual. Comparisons with other companies can lead to many wrong answers merely because the character of the plant account will differ so widely in different companies. Without considerable analysis of the various component parts of the plant account, arbitrary percentages may result in an opinion not justified by the facts. Allowable depreciation for tax purpose is so often computed on a base different from the book plant account that a comparison with book accrual may lead to a wrong conclusion. In other words, don't forget that for Federal tax purposes items included in account 100.5 would be depreciated over the life of the property to which such items relate, even though they have been written off the books by charges to surplus or entirely amortized through charges to income. Let me give you a suggestion. In forming a judgment of the adequacy of the depreciation reserve and the annual accrual, appraise management. In a well-managed company, the reserve and the accrual for depreciation are examined at frequent intervals. Good management and poor accounting are rarely found in the same company.

On the question of what was a satisfactory payout of earnings in dividends, you generally thought 75 to 80%. I agree with this and am inclined to the higher percentage. Of course, special circumstances must be considered by management of some companies. I have discussed this matter many times with operating company officials and find that there are still many who either think they must retain a larger portion of their earnings for a rainy day or believe that a larger portion should be retained toward financing the construction requirements. Where a company is in sound financial condition, there is no justification of retaining any large amount of earnings, thereby forcing the common stockholder to reinvest his earnings in the company whether he wishes to or not. The comments received on this question may help to drive home this thought to the utility executives who still think 50% payout is sufficient.

A number of questions were included relating to management seeking ideas on what the respondents thought management should do about various matters. Let us look at a few of these questions and the answers. One of the questions we asked was, "Do you regard it as an obligation of management to carry on a substantial publicity program

against the inroads of what is currently called the 'Welfare State?'" The answer to this was over-whelmingly "yes." The only comment I will make is that, if we assume that the 65 respondents represented a good sample of this association, then this association seems to be the "backbone of the Republican Party."

Did the respondents think that the make-up of the board of directors of a company had any effect on the investment position of its stock? About 75% thought it did. I was more interested in the comments on this question. The majority thought that a board of directors should consist of a majority of either well-known people or prominent business people residing in the territory of the company. About 25% of the respondents indicated that the stockholdings of board members should be substantial. We have had some experience in reconstituting boards as companies were divested. It may interest you to know of some of the problems we encountered in getting people to serve as members of the board. I suppose you know that every officer and director of a holding company must file with the SEC a statement in considerable detail giving his holdings of the securities of the company and any of its subsidiaries and must report changes in such holdings monthly. Both the Public Utility Holding Company Act and the Federal Power Act prohibit, with some minor exceptions, an officer or director or appointee of any bank, trust company, banking association, or investment banking house from serving as director of a utility company. It is perfectly amazing the number of people who seem to be eminently qualified to serve as directors who are disqualified by law and the regulations promulgated by the commissions or the number of stockholders who object to the reporting requirements. It seems when you are looking for good directors that the most capable people you can find are the very ones who cannot serve. Local business people are often reluctant to serve as they believe that to do a good job as a director will require more time than they can spare from their own affairs. When you finally do get a satisfactory number of qualified prominent businessmen to serve, very often their stockholdings are, and will remain, nominal. They, as a rule, have the majority of their investments in their own business, or in the company by whom they are employed. Taxes also take much of their income, and there is little left to make substantial investments in the company's stock. I agree with the majority of the respondents that a strong board is desirable, but finding persons who are willing to and can serve is sometimes difficult.

Would you like to see emphasis placed on quarterly reports to stockholders or on annual reports? Twenty-nine of the respondents said quarterly and 39 annual. Here again we differ somewhat with the majority. General Public Utilities Corporation has been giving, in its quarterly reports to stockholders, a complete story of the events of the year to date, and, at the end of the year, the annual report to the stockholders is a summary of those quarterly reports. We have tried a short form of report to stockholders and make available to anyone who cares to have it a detailed report.

We asked, "What was the most important thing management could do to mold the investors' attitude in favor of a company?" and, summarized, the answers added up to, "Full

disclosure." Many suggested simplification of the reports to stockholders with the results of operations explained in nontechnical language.

Summaries of all the answers to the questionnaire were distributed widely, and all the comments made on the questions relating to management were included in the distribution; and I hope that the executives who got the final report will particularly pay attention to the many fine suggestions included in the answers relating to management.

There seems to be a growing awareness by utility men of the necessity for complete frankness on their part in presenting the facts to their stockholders and to you. In our system, we have tried to do a good job of telling you the facts as we see them and explaining our problems and our hopes for their solution. Our address is 61 Broadway. Come and ask questions.

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Chairman Hyde: Thank you, Mr. Busch, and I know that you lived up to the billing that whatever you said would be of great value to all of us.

We don't have time for an intermission, but I think it might be a good idea to relax for a minute by standing up. (*Recess*)

Certainly, no utility forum today would be complete without something on the natural gas industry. That industry has captured the imagination of everybody. It has been rather profitable to those who had enough foresight to go into it. Like everything that grows so rapidly, there are certain pitfalls, certain things that growth itself overcomes. You tend to lose sight of the problems in looking at the favorable factors.

There are many men in the Street who have devoted a terrific amount of study and time to the natural gas industry. I could have gotten any number of people to talk to you today, but most of them would have been a little bit biased because they are, shall we say, trying to sell the securities. I wanted to get a man who is completely unbiased to give you a realistic story. I don't think I could have made a happier selection than Mr. Herbert Bernenko of Laurence M. Marks & Company. (*Applause*)

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Mr. Herbert Bernenko: I have been asked to discuss the expansion possibilities and limitations of the natural gas industry.

Three principal factors as I see it will govern the further growth of the industry; namely, the availability of gas reserves, the adequacy of markets and the supply of capital. The first two seem to me to be the important ones for, if they can be satisfied, the supply of capital should present no problems.

GAS SUPPLY

Certainly one of the factors controlling the further expansion of the natural gas industry is the size and availability of reserves.

There is no great mystery today about gas reserves. The American Gas Association as well as numerous independent geologists have done much to remove the mystery and uncertainty previously surrounding this subject. The estimate of the American Gas Association of *proved recoverable* gas

reserves of the United States at the end of 1949 will be released shortly and is expected to show a further gain over the 173.8 trillion cubic feet estimated for the end of 1948. The proved reserves as of the end of 1949 should be somewhat larger than at the end of the preceding year, even after total 1949 production estimated at around 6-2/3 trillion cubic feet is taken into consideration. In all probability, therefore, there were at the end of 1949 gas reserves equal to twenty-eight to twenty-nine years requirements at the 1949 rate of production. In each recent year the increase has exceeded withdrawals, and the balance between the two continues favorable. Prospects are that for the foreseeable future new gas reserves will continue to be discovered at a satisfactory rate.

Despite this apparently favorable statistical position, it is not easy under present conditions to assemble contracts for large amounts of gas reserves for pipe line projects. Two fairly recent developments bear this out: the first is the deal between Peoples Gas and Gulfcoast Northern with the latter getting a one-half interest in the proposed Texas-Illinois Pipe Line because of the strategic gas purchase contracts it held; the second is the deal between Panhandle and Trunkline for the same reason.

The seeming inconsistency between the large underground gas reserves and the difficulty in contracting for new supplies is attributable to two main factors:

1. The now widely recognized reluctance of the oil industry generally to enter into long-term gas sales contracts because of regulatory fears. This, of course, does not apply to *all* companies, but there is no doubt that fear of regulation is keeping large supplies of petroleum company gas reserves off the market. The picture would change measurably if this gas became available to pipe lines. *This* could come about either by the passage of legislation desired by the producing interests *or* by segregation of gas reserves. In this connection, it is also well to bear in mind that recent years have been flush ones for the oil industry—years in which earnings have been such that managements could well afford to be independent. If *you* had been the head of an oil company enjoying the largest earnings in your company's history, would *you* have risked regulatory headaches and battles with the Federal Power Commission for the sake of the added dollars natural gas would bring? In a period of somewhat lower petroleum earnings, additional income from the sale of gas might become more appealing, and, in the future, this factor may enter into the willingness of the oil industry to sell gas. A decline in oil earnings, such as many expect, could open up the flow of gas from oil-company-owned reserves.

2. A second factor accounting for the discrepancy between the large estimated reserves and the current difficulty in obtaining supplies for pipe line purposes is what some term the engineering aspect. In many fields, recycling operations are being conducted, and until the entire field is recycled it is not feasible to sell gas to pipe lines. There are reported to be numerous fields with very large reserves where gas is being withheld because of these engineering considerations. One large field alone with an estimated 5 to 6 trillion cubic feet of gas is reported to be selling but a trickle because of this aspect. According to some people, probably 10 to 12 trillion cubic feet of gas could come on

the market in the next three to five years as recycling is completed.

A further consideration in the longer term outlook for gas reserves is the expectation of many geologists that large additions will result from exploration and drilling on the continental shelf in the Gulf of Mexico. This could produce a large increase in the country's natural gas reserves. Some industry people think off-shore discoveries will add very materially to the country's reserve picture.

I am not a geologist and shall not dwell on the reserve situation too long. However, I do wish to point out that some top executives in the natural gas industry believe that a matter of three to five years *may* see the situation actually easier than it is today, for the reasons outlined.

In the interim, the situation may continue relatively tight with gas prices creeping higher under pressure of demand *or* from state price fixing established under the guise of conservation. Executives of two large natural gas systems recently expressed the opinion before investment groups that the price of natural gas in the field would continue steadily upward over the next few years. Such increases of themselves could also go a long way toward loosening some of the larger blocks of gas reserves.

Thus, so far as reserves go, it is believed that ample supplies are or will be available to support further pipe line expansion. Although the situation may be tight presently, this very tightness may in time induce its own solution. Fundamentally, the reserve situation is strong enough to support considerable further expansion of the natural gas business.

Now—what about the situation with respect to markets?

MARKETS

The market situation has its complexities, and these vary greatly according to the region. Since the change in California last summer, when residual fuel oil prices declined to a point well below the price of interruptible natural gas, which caused an abrupt loss of industrial business, security analysts have become aware that markets for unlimited supplies of natural gas cannot be taken for granted. Although the California experience has not been repeated elsewhere to my knowledge, it nevertheless seems to have had an effect on the thinking of pipe line managements. A note of caution appears to have crept in during the past six months, different from the attitude of the past three to four years of frantic scrambling for certificates and steel pipe.

In most important areas, particularly those *not* on tide-water, natural gas continues to enjoy substantial price advantages over oil and coal, both for domestic and house heating purposes and for industrial uses. In large areas the industry can continue to expand, confident in the knowledge that competitively natural gas is cheaper than other fuels. Declines in certain oil prices have reduced price differentials somewhat since 1948, but natural gas still holds material price advantages in most areas.

Then why the note of caution?

Well, as you know, the gas pipe line industry requires high load factors to support the large investment in long-distance transmission lines. Problems arise in connection with the balancing loads for the off-peak periods. This problem may be particularly troublesome in the New York

and prospective New England marketing areas. I should like for a moment to discuss the situation here in the East, for very interesting developments are in the making.

The lines thus far projected to the New York area will bring natural gas which will be used principally for enriching purposes, in place of oil in gas manufacturing operations. Boiler fuel sales are contemplated, but only in limited amounts to assure a satisfactory load factor. If the role of natural gas is to be limited only to that of replacing oil for enrichment purposes, then the transmission lines would have but moderate and slow growth ahead.

However, we do not believe that, with all the advantages of natural gas, the growth will be either moderate or slow. The product, that is, natural gas, is too attractive, and the pressure for it too great from consumers, from regulatory commissions, and from stockholders of the distributing companies.

Over the next two to five years, natural gas should gain an increasing portion of the market in the New York area and in New England. Once natural gas has come in, its use should increase, and it is only a matter of time in my opinion before Public Service Gas & Electric and Brooklyn Union Gas will go to straight natural—followed by Long Island Lighting and Kings County Lighting and parts of the Consolidated Edison system.

The subject of the potential demand for natural gas in this northeastern area provides an interesting field for speculation. For example, by analyzing the potential heating load alone in the area comprising New York, New Jersey, Connecticut, Massachusetts, and Rhode Island, some very intriguing possibilities can be reached. At the end of 1949, the ratio of heating customers to all domestic gas customers in these eastern states was less than 7%.

By comparison, in a group of states comprising Illinois, Indiana, Michigan, Ohio and West Virginia, the saturation was around 23%. However, even a 23% saturation is regarded as low. Michigan Consolidated Gas, which had some 99,833 house heating customers at the end of 1948 recently received 106,122 heating applications upon the removal of restrictions. This would result in a 33% house heating saturation. Minneapolis Gas Company, which has aggressively promoted house heating business, has attained a saturation of between 40 and 45% and expects to go considerably higher. Even Consolidated Edison reports that 85% of the new homes built since the end of the war installed gas heating equipment. This gives some idea of the demand for gas for house heating purposes.

Suppose now that in these eastern states a house heating saturation of 25% could be attained, a by no means unreasonable possibility. The natural gas required to meet such a demand would be substantial. Theoretically, it would result in an increase of around 800,000 house heating accounts requiring about 120 billion cubic feet a year of 1000 Btu of gas. Adding this potential heating load to domestic and industrial demands indicates a vast potential market for natural gas in this eastern area of sufficient magnitude to support considerable pipe line expansion over that now projected, provided: (1) that the gas be priced competitive with other fuels and (2) that industrial and other customers be developed to provide off-season interruptible gas loads at satisfactory prices.

What then are the prospects for securing the balancing loads needed to permit further pipe line expansion.

In this connection Mr. Hudson Searing, President of Consolidated Edison, in a recent talk before the New York Security Analysts, indicated his belief that, on the receipt of large quantities of natural gas in the metropolitan area, oil now used would be displaced in such large quantities as to create a severe glut in the market for residual fuel oil. This, Mr. Searing probably hopes, will be attended with price weakness. In the original Transcontinental proceedings, it was estimated that some 14 million barrels of fuel oil, used annually for gas enrichment by utilities in this area, would be displaced by natural gas, plus such additional amounts as would be displaced by gas used for boiler fuel by these utilities in their electrical operations.

Since that earlier estimate, plans have expanded so that the figure now would be even higher. The total amount of oil used for gas enrichment on the East Coast has been estimated at over 24 million barrels last year, and in the next few years a large portion of this may be displaced by natural gas. Now this alone is not of sufficient magnitude to disrupt fuel oil prices. However, it is an addition to the other problems facing the oil industry. There are experienced oil and gas people who believe that, unless the refineries in this area change their cracking setups, a substantial oversupply of fuel oil will develop in this market area with consequent unsettlement in price.

It is this possibility that largely accounts for the note of caution among pipe line people today. Residual oils and natural gas compete for many of the same industrial uses, and, should the price of residual oils be depressed, it could affect the ability of pipe lines to sell firm and interruptible industrial gas in sufficient quantities to assure a good—that is a profitable—load factor, and it would certainly have an effect on expansion plans. The interruptible industrial gas business is necessary as the balancing load for the retail distribution business. If, in addition, the distributing companies go after that large potential house heating load of which we spoke, the seasonal character of the gas load will be even more accentuated.

It does look as if the natural gas business in this area and New England might be faced with some serious problems, particularly if the price of crude should break, as many expect. However, I do not wish to seem to emphasize these problems or leave you with the feeling that they are going to arrest the expansion of the natural gas industry. After all, the natural gas industry enjoys extremely smart and capable management, quite accustomed to fighting for markets. Before John L. Lewis boosted the price of coal and demand increased the price of oil, the industry was in a continual battle with competing fuels, and even at the time when natural gas was a premium fuel it made steady gains. For pipe line men schooled in the fuel battle, the prospect of another knockdown and dragout with fuel oil is an old story.

Though it is an old story, the industry is working on new methods, methods incidentally that again demonstrate the resourcefulness of natural gas managements.

Although full details have not yet been revealed, it appears that one of the methods by which the lines coming into this area and the New England area may reduce their

dependence on off-season dump gas sales is by en route storage—shortening the distance from the underground reserves to the markets.

I think the advantage of this is apparent—a high year-round load factor can be maintained between the Texas gas fields and, say, New York or Pennsylvania storage fields where, off season, gas is stored rather than dumped at only the commodity charge. In season, it is delivered to the distributing companies for the full demand and commodity charge for resale for superior uses which bring the highest retail prices.

This is exactly what the Michigan-Wisconsin Pipe Line has been set up to do. A transmission system with adequate storage near its principal markets can operate its main line at 100% load factor, sell *no* interruptible gas if it wishes, and meet peak day demand in excess of 200% of its pipe line capacity.

Another method gaining increase acceptance is the conversion of manufactured gas plants to high Btu oil-gas plants for peaking purposes. Such plants, producing 1050 Btu gas, shave daily or hourly peaks. The whole thing—storage, a pipe line, and peak shaving high Btu oil-gas manufacturing plants—makes a neat economic package of the type that may be in store for New York and even for New England.

Actually, a fuel revolution is in the making at the present time—with pilot plant operations now going forward on the conversion of oil to gas, and this type of plant could also become an important factor for peak shaving in a matter of a few years.

Well—why all this discussion about the situation in the New York and New England areas? Primarily to show that there *are* problems—problems with which managements are wrestling right now and to which we may see interesting answers unfold in the not too distant future. Often in the past the pipe lines were able to pass on the load factor problem to the distributing gas companies, but the distributors are also being cautious and do not want to be caught with high “take-or-pay-for” contracts.

The fact that managements are cautious is a healthy sign. It should mean fewer mistakes, which in the last analysis are costly to stockholders. It is quite possible that the New York market area may require a period of readjustment following the arrival of natural gas, and, for a time, competition between fuel oil and natural gas may become severe. The effects of such a development would in my opinion more likely be of a temporary than of a long-term nature. The longer-term market possibilities for natural gas are enormous; natural gas managements are extremely able and resourceful and will face problems with their eyes open.

I have stressed the situation in this northeastern area for two reasons: (1) because attention generally is focused on this area at the present time, and (2) because in most other areas of the United States the expansion opportunities of the natural gas are still substantial and the problems not so complex as they may be here.

The third ingredient to the further expansion of the gas industry is an adequate supply of capital, and on this I would only say that, given adequate reserves and markets, there should be no shortage of capital.

In summing up, I should like to make the following points:

1. The gas reserve contract situation is tight currently but may improve in a few years as new reserves are discovered and as gas not now for sale comes on the market. Pipe line expansion should not be hampered for long by any inability to make new long-term contracts.

2. In most areas of the country, natural gas is still cheaper for most uses than competing fuels.

3. The demand for natural gas continues to grow with potential house heating loads far from saturation points. On this score alone the natural gas industry faces considerable further expansion.

4. In the New York and New England areas a vast market exists for natural gas. The major problems relate to the balancing loads necessary to offset seasonal retail gas distribution.

5. Possible unsettlement of the heavy oil price structure may create competitive problems which should be temporary alongside the larger growth potentialities over the longer term.

6. The natural gas pipe line industry is led by extremely capable and resourceful managements that anticipate these problems and right now are working on methods for their solution. These methods may take the form of en route storage and peak shaving plants. Other methods may be devised. The product is in demand, and by one means or another it *will* be delivered to the market.

7. Finances should present no serious problems to legitimate projects.

Does the natural gas industry have substantial growth ahead—I should say *yes*.

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Chairman Hyde: Thank you, Herb. Although you went about twice as long as you were supposed to, I couldn't shut you off; it was too good.

We have about ten minutes in which to ask some questions, but before we go into that, I want to thank all the speakers for putting on what I think was a wonderful program. I want to thank all of you for coming, and you can tell by the shortage of materials to go around that the number far exceeded our expectations.

Now, if there are any questions, just come along. They can be directed to any of the speakers on any of the subjects.

Question: I should like to ask Mr. Tatham whether he knows how much of that growth is the expansion of rural electrification. It seems to me a growth factor is involved.

Mr. Tatham: The expansion in the industry—no; these figures I have given represent the privately owned electric industry only. I assume you are referring to the REA, but—

Question: Don't they buy from private industry?

Mr. Tatham: To a considerable extent, they do. I haven't any breakdown to show what portion of the sales goes to the REA.

Question: I should like to challenge Mr. Tatham's conclusion with respect to earnings here. His chart shows that the investment in electric utilities in 1932 was not surpassed until the year 1948, and we all know there was a great deal of addition to plant in that period. The number of kilo-

watts of installed capacity went all the way up; yet dollar earnings only kept pace with investment, and they weren't nearly so good on dollars later on either.

If you could figure out some index—let us say meat and potatoes purchased with gross income per dollar of installed capacity—I would think the real earning power of the real plant probably fell in half over that period.

Mr. Tatham: Of course, I mentioned that a number of factors were involved here. The reason why the plant figure does not record the additional capacity installed is this: It primarily reflects write-offs made by the industry. That is a factor; there is no question about it.

A second factor is the decreasing depreciation reserve in relation to plant. However, if you eliminate the effect of both of those, there has still been a very substantial increase in the efficient use of plant. I checked it with a few companies that had made no write-offs and found that, although the trend did not go up so quickly, still, it very definitely went up.

As far as the true value of the dollar is concerned today, that is beyond my depth. It is true of everything. No earnings in terms of purchasing power of any corporation or any individual are as good as they were fifteen years ago.

Question: Yet there has been no keeping pace whatsoever in utility earnings. They have stayed constant in terms of dollars. In other industries, you have seen a great increase in terms of dollars.

Mr. Tatham: That is very true over the past three years, since 1946. Until 1946, in terms of dollars, industrials and utilities did about the same. From 1946 to 1948, of course, they have gone up through the roof, and the utility industry hasn't, nor could it be expected to, unless the rate of return was geared consistently to a fair value rate base, which has not been the case, despite the fact that from every economic viewpoint, it should be the case, and there is increasing evidence that the fair value rate base may prevail somewhat more.

Chairman Hyde: It looks as if you opened up an argument again.

Question: Might I question that the relative stability of, let us say, industrials during the pre-1946 period was not due to lack of growth of earnings thereof, but due to excess profits taxes which hit industrials more heavily, perhaps, than utilities. Perhaps taking the earnings levels and pretax levels is more comparable; you would get quite a different result.

Chairman Hyde: Of course, we are talking here on the stability and not the growth of earnings. I think you are confusing that point a little bit.

Question: Mr. Hyde, this may not be germane to the discussion, but I have not heard anything said about the heat pump as a possible means of expanding the utility load.

Chairman Hyde: Well, I would suggest this to you: When this is over, you come up and talk to Charlie Tatham. He is the expert on that. Do you want to say a few words about that now? You always like to.

Mr. Tatham: You haven't got much time.

Question: Mr. Bernenko mentioned, as a possible solution to one of the problems facing the companies, bringing gas up to this metropolitan area en route storage. It would

appear to be a good solution on the face of it, but I wonder if it wouldn't result in a much higher price of gas and therefore lessen the competitive advantage that it presently has under the conditions he visualizes as possibly occurring?

Chairman Hyde: I think he has an answer to that.

Mr. Bernenko: On the face of it, it might seem as though it would raise the price of gas, because it does require additional investment, but look at it this way: If you sell all your gas at the demand and commodity charge—let us take a case in point here. Let's say you can get a 65% load factor. You get an average price of 32 cents as against dumping gas for 22 cents, which you would have to do if you didn't have storage.

You may have a larger investment, but it results in a higher average price for your product. Putting it in the ground for six months and then pulling it out may increase the value of that gas, as you can see, by 10 cents a thousand cubic feet. It may not necessarily. A lot of economic problems are involved. I don't want to claim I have the answer, but I think it is perfectly feasible. After all, it is what we know two major pipe lines are working on at the present time, both of them looking at storage fields.

(Mr. Bernenko assumed the Chair.)

Chairman Bernenko: Can't we get some questions for a really qualified speaker for the industry, Mr. Busch? I say that so that you will throw your darts at someone else and really miss me. Who has a question for Mr. Busch?

Question: How is GPU doing?

Mr. Busch: GPU is low now, but we will do better.

Question: In connection with the last question on natural gas, isn't there a conflict in the company's interest between regulated and unregulated business? If they build these storage plants, more of their load will be a regulated load, and they will be subjected to limitation of earnings, whereas, if they can sell to industries, at least they can earn over 6%, if they can get away with it economically, as they probably can.

Why should Transcontinental, for instance, want to reduce its off-peak business, which, I understand, is free from regulation?

Chairman Bernenko: Well, it is a rather complicated problem, but just look at the figures. On industrial dump gas, you are going to get 22 cents. That gas is costing Transcontinental at least 17½ cents, minimum. It is going to run up from there. It is going to move that gas 1,500 miles. Figure a cent and a half a mile. It comes to 18 cents. It will lose money on it—they probably won't, but they wouldn't make very much on 22-cent gas. Do you think so?

Question: I understood that they hoped to earn considerably over 6%, and that the explanation was that quite a bit of their business was not regulated.

Chairman Bernenko: That may be in firm industrial business, but you run into competition there. There is a competitive factor.

If they can get firm industrial business, it is highly desirable, and it is free from regulation, and, generally, in the past, companies have been able to make more money on it, but in this marketing area here they are faced with some real problems because of the oil situation.

You are thinking, probably, in terms of Panhandle,

Northern Natural, and some of those companies that haven't had the competition with oil and have made good money on their firm industrial business.

Have I clarified it for you, or confused you? Probably the latter. It is a confused picture.

Question: Do you think that they will be able to earn substantially more than 6% on their investment?

Chairman Bernenko: I wish I knew. I honestly don't know. I think that it is a situation right now where no one—they don't know, in the first place, whether they have a 340 line or a 505 line, or a larger project. They don't know whether they have or have not got the New England market. There are a lot of complicating factors. They may be more certain as to what they can earn. I don't feel too sure myself. I cannot figure it out at this point. After all, there are hearings going on right now, and, in the present Transcontinental application, the load factor has changed, the prices have changed, and so your whole picture has changed. You have to wait until you see the outcome of the present hearings down there before you really know what you have.

Question: Do you have any opinion as to whether the volume of oil will come down over the latter part of this year? It might not have the same effect on the gas business in the Great Lakes area as that you mention occurring in the East here.

Chairman Bernenko: I am honestly not familiar with the volume of oil that will come down. Can anyone check me on that?

The oil is not coming into the United States. It is going to stay in Canada. It will come into here on bond, or some such thing like that. You may not have a comparable situation there.

Question: Mr. Busch, would you care to comment on the prospects for fair value buying—briefly, how many states favor fair value?

Mr. Busch: I am sorry I cannot give you the number of states, because our system is largely in the East, and I am much more familiar with it there. We operate in Pennsylvania and New Jersey largely. We have gotten out of New York State. Both those states are fair value states. In New Jersey, the law does not specifically state that it is a fair value state, but the decisions of the courts have always said fair value.

Pennsylvania is a fair value state, and I think there, as you know, the commission has almost consistently recognized fair value.

We have just had a rate case turned down in New Jersey on New Jersey Power and Light. If fair value had been considered by the commission, I don't know how they arrived at their decision. We may get an answer to that one by another method.

Question: I should like to pose a question for Mr. Pastoriza, who, I think, is as neutral as anyone on the dais. I am asking the question as an investment expert. I see a natural gas pipe line company, Tennessee Gas Transmission, selling at $2\frac{1}{2}$ times its book value. I see Mr. Busch's company selling at about book value. They are both regulated businesses. We have heard something of the problems of both. I should like to know what he thinks about what you get for your investment dollar in those two stocks.

Mr. Pastoriza: I think you have put me on the spot. I haven't studied that particular gas company in sufficient detail to be able to give you a really competent answer. I would like to use your question as an excuse for making some general remarks on this fair value situation.

I had occasion, when I first got into the utility business, to study the history—some of the history of regulation. When the electrical business first started, electric machinery was extremely expensive. By the early years of the century, the reproductive value of that electric machinery was very considerably below the original cost, and the Wisconsin commission, which was one of the earliest to regulate electrical industries, went to reproductive value, and they reappraised all utilities at much reduced values, because they could buy a new generator, and a new turbine, and a new engine from the manufacturers at much lower cost than the original stuff.

Then, later on, of course, in the '20's, we reached a point where original cost was less than reproduction value, and the companies all wanted reproduction value, and the commissions all wanted original cost.

We have had the same thing. We have had a flipflop in Pennsylvania. I remember some financing we did in Pennsylvania in the late '20's when we got a rate base based on reproductive value, and then the Democratic Party swept the country, and Pennsylvania went back to original cost. Then Pennsylvania got a Republican administration, and they became a fair value state.

I don't think that we can make long-term conclusions about these things in any of these jurisdictions.

Now, when you are talking about bonds that run twenty or thirty years, you have to make long-term conclusions, and that is what I have been mostly concerned with, and so I cannot answer your question for the next few years.

Question: What proportion of GPU—this question is to Mr. Busch—comes from Manila?

Mr. Busch: Well, it was 52 cents last year. I would just like to give you that figure, because it is one that we always give in our reports to security holders.

Question: Is it necessary to discount that part of your earnings because of exchange difficulties?

Mr. Busch: Yes. We haven't taken any earnings out of Manila. Right now, there is a currency freeze between Manila and all countries. You cannot get dollars out, except for specific purposes, though the government has assured us, or at least assured our people, that it was not intended to freeze earnings. It was not intended to freeze getting investment out of Manila. I take that with a little grain of salt, because, if we tried to get our total investment out of Manila, and getting the pesos out in the form of dollars, I'd bet the freeze would work pretty fast.

Question: In other words, in appraising your stock, one should probably look at United States earnings only, plus some additional allowance for Manila.

Mr. Busch: I think most people do that.

Question: I work for a life insurance company that does business out there, and we had the freeze applied.

Mr. Busch: Maybe you would like to have your pesos in Manila securities. We would be glad to talk to you.

Chairman Bernenko: I wonder if it wouldn't be well to adjourn and socialize a bit before lunch.

Management of Trust Funds by Banks

THURSDAY MORNING, MARCH 2, 1950

HOWARD F. VULTEE, vice-president, The Marine Midland Trust Company of New York, presiding.

Chairman Vultee: I think there were six of us who, quite a few years ago, thought that a society of security analysts would be a good thing. Also, I was one of the early presidents and on the Board of the New York Society for a great many years, and so it gives me considerable pleasure to see our brain child grow into a sizable organization and become part of a national society. In view of the history I was so intimately connected with, it is particularly a pleasure for me to welcome everyone.

The first speaker today is well known to many of you. He is Bascom H. Torrance, vice-president of the City Bank Farmers Trust Company, who has chosen as his subject, "The New York Approach to Trust Investment—Comment and Criticism."

Mr. Torrance has been with the City Bank Farmers Trust Company almost 30 years. I think it is fair to say, although he asked me not to, that he is a nationally known authority on trust matters. More recently he was chairman of the trust investment study committee of the New York State Bankers Association. Their report was submitted a short time ago. Appropriate legislation to change the trust investing laws has recently been introduced in New York. I wish to say—and if any of you have read this report I think you will agree with me—that it is an epic work and will have a profound influence on trust investing in New York, and, in my opinion, in other states of the country.

It is a real pleasure to introduce Mr. Torrance. (*Applause.*)

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Mr. Bascom H. Torrance: Thank you, Howard. I am sure all of you have heard introductions before. I appreciate them just the same.

I hope this title, "How Banks Invest Trust Funds," will not suggest to any of you that there is any essential difference in the basic purposes of a trust, whether administered by a bank or by anyone else, differences in procedure and in method in investment, for naturally the same law applies to all trustees, and so, in whatever I say, I shall be thinking of all trustees subject to the New York jurisdiction.

As most of you know, this state has long been considered one of the foremost representatives of that slowly diminishing group of states that still follow the so-called "legal list" approach as opposed to the Massachusetts, or "prudent man," approach.

Briefly, the difference between them is simply that Massachusetts has stated an overriding rule of prudence and has never attempted to define by statute what are proper trust investments.

New York, on the other hand, has long followed the practice of setting elaborate statutory provisions which trust investments must meet, and they are substantially, with some exceptions, those permitted savings banks.

Now, it must not be assumed that the "legal list" approach has been wholly without justification. I think rather it should be regarded as a stage in the evolution of our thinking about trust investment.

In 1830, when the Massachusetts court first stated the general rule of prudence, we were still a relatively simple and predominantly rural economy. The population of the country was something less than 13 millions, and of these only about 1 million were living in cities.

Looking back today over more than a century of revolutionary technological progress, it is easy to forget how few securities were available at that time. Under those circumstances, it seems only natural that a court would have stated a rule of investment conduct in general rather than in specific terms; no need for further refinement had yet arisen.

By 1869, when the leading case in New York of *King against Talbot* interpreted the Massachusetts rule as requiring the exclusion from the field of trustee investment of stocks, our industrial development had definitely begun, and with it we had begun to witness some of the casualties that usually accompany such developments. Again, then, it seemed only natural that we should have begun to seek some sort of objective standard, some sort of objective guide, to safe investment; and, as the years went on, as our economy became more complex, again it seems natural that some of these standards should have found their way into a statute.

The wisdom of Massachusetts has been not in failing to try to find these standards but in refraining from incorporating them into a statute, and the difficulty in our own state has been that we have been slow to discard old methods after they had largely outlived their usefulness. "Legal lists" did, and no doubt could, serve a useful purpose, especially for inexperienced persons, in earlier periods of meager financial information and almost complete absence of public regulation. Today, however, a formal "legal list" presents almost as many problems as it solves.

Some of these shortcomings of a "legal list" have been clearly revealed in this study which Mr. Vultee has mentioned. That study proceeded for something over three years, and our report runs to something like 170 pages, and so obviously I can tell you only a very little about it this morning.

N. Y. LIST UNNECESSARILY RESTRICTIVE

For one thing, the New York list has been found to be unnecessarily restrictive. Not only has it failed to select many bonds of recognized high quality, but it has consistently selected a far smaller proportion of total available bonds than those considered high grade by other methods of selection, such as the agency ratings or the judgment of the market itself, as indicated in prices and yields.

In speaking of volume, I think we have to make a distinction among the railroad bonds which were included in our "legal list" during the depression of the 1930's under

our so-called moratorium provisions, special legislation passed to retain on the list issues that were not meeting the statutory provisions, and the bonds that continue to meet those statutory provisions. If we include these moratorium rails, we do not make a bad showing as to volume, but, as they no longer meet our tests, since many of them are quite unsatisfactory investments, it seems to me that in all fairness we should not take them into account. Without those bonds, we make a very poor showing indeed.

At times, the volume of our statutory "legal list" was not more than half and at other times it was only about one third of the volume of issues considered of good quality by these other methods of selection. For example, in 1936, when our statutory legals reached a low point at only about 11% of outstanding corporate issues, bonds rated in only the first two grades by the rating agencies represented almost 32%, and issues judged to be of good quality by the market were around 26% of those available.

Another thing that I think should be charged against our "legal list" is its failure uniformly to select bonds of good quality. Now, obviously, there is no advantage in increased volume if this increased volume is going to mean an impairment of quality or performance.

We tested for quality chiefly by noticing, comparing the incidence of defaults and the incidence of quality deterioration in the volume of issues selected by these various methods of selection, and it is extremely discouraging to find in the "legal list" a very poor showing by comparison with the others both as to quality deterioration and as to default.

You would expect in a list that selects a smaller volume of issues a better showing as to quality, but we distinctly did not find it. What is more important, you would expect in a "legal list" a substantial degree of protection in a period of adversity, and, again, it was extremely discouraging to find in our New York list, in the period from 1928 to 1940, more than \$800 million of bonds which went to default. That sort of record, it seems to us, is a surprising indictment of any official "legal list."

PREMIUM PAID FOR LEGALITY

Another thing should be mentioned, and that is the fact that, notwithstanding its showing as to volume, restrictiveness, and selectivity, there is evidence that a premium is paid just for legality. Over the period of our study, legal issues very often commanded a price premium over those of comparable quality that were not legal, and, to make matters worse, this premium today, at a time when the average yield from legal issues is about half what it used to be, when the purchasing power of the dollar is at one of our all-time lows, and when Federal taxes are at near their record high, again, it is extremely disappointing to find that this premium is paid not for greater safety but simply for conformance to a particular set of statutory requirements.

We could make some other observations about our "legal list." For one thing, New York is one of very few states still limiting its trustees to nothing but bonds. Of the 17 states where mutual savings banks operate, it is the only one that restricts its trustees to a greater degree than its savings banks. It also allows its life insurance companies wider latitude than its trustees. Yet, as we all know, both

savings banks and the life insurance companies serve purposes entirely different from those of a trustee. It is small wonder then that we found most of our trusts already unrestricted as to legal investments and a very definite trend in new trusts away from restriction to legal investments.

COMMITTEE HAS SEVERAL PROPOSALS

What have we done about this situation? Our committee has developed several proposals. Our first was for a separation of the provisions governing trustee investments from those governing savings bank investments. Our second was for an abandonment of the statistical formulas. The third was for the granting of a permissive area within which full discretion would apply, including the power to purchase common and preferred stocks. The limit we suggested was 35%.

Now, after a considerable amount of discussion and a number of conferences with various groups in the state interested in trust investment, a bill has finally been prepared and introduced in Albany. It is based on our proposals but does not include all of them exactly as we had hoped it would. We found we had to make some modification, some compromise, in order to meet the views of all interested parties.

There is not time here to discuss these particular proposals in detail but there is one that I think you might be interested in as a group of financial analysts, and that is our proposal for the abandonment of statistical formulas. Incidentally, that is the one on which we had to make a substantial compromise to satisfy particularly the Surrogates' Association. They were willing to let us abandon the statistical formulas in the tax-exempt field but not in the corporate field. To that extent, we are still tied to savings bank investments, but I am sure I do not have to tell any experienced analyst anything about the difficulties of constructing statistical formulas. Some of you, I am sure, have very definite ideas of your own, in one field or another, which you are willing to defend with considerable vigor, but it may interest you, perhaps amuse you, to note some figures prepared by Professor William E. Dunkman, of the University of Rochester, while he was working with the National Bureau as a representative of the State Banking Department. Professor Dunkman compared the "legal lists" of savings banks in the 7 states as of the year 1945, and that comparison illustrates very vividly the wide area of disagreement as to what constitutes a good test even among those who think they know how to set such tests. In those 7 lists he found a total of 225 railroad companies represented as legal in one state or another, but of this total only 15 were common to the 7 lists, that is, less than 10%, about 7%, I think. He found 230 public utility companies were represented in all the lists but only 25 were common to the 7 lists. That is about 10%. In 6 states which admitted industrial bonds he found a total of 35 companies represented in the 6 lists, and of these only 1 was common to the 6 states.

Again illustrating some of these differences of opinion among analysts, the neighboring state of New Jersey places great emphasis on financial condition. Pennsylvania, which sets an earnings test, does not even mention it, and Connecticut has finally abandoned an earnings test for railroad

bonds, a test which in that field used to be considered all-important.

I could mention some other difficulties about the formula method of selection, but most of you are already familiar with them. You know the difficulties of giving adequate weight to trends, to compensating factors, to competitive factors. I have heard some of you boast that you could find not so good bonds that would meet almost any fixed formula and perfectly good bonds that would fail to meet a formula that was considered an excellent one.

From our own experience, I am inclined to agree with you, and for proof that judgment can find good issues which fixed formulas will not select, it seems to me all we have to do is look at the present composition of our New York list. It may surprise some of you to know nearly half of the present volume of our official list in New York is made up of issues added in the discretion of the Banking Department acting in behalf of the savings banks under an amendment passed in 1938 which gave the Banking Board such authority. In other words, not much more than half of our present official New York "legal list" consists of issues that meet our statutory tests.

It seems to us quite an unnecessary and an utterly illogical situation to continue a complicated system of formulas and authorize an administrative board in its discretion to set them aside.

Perhaps I should say another word about that 1938 amendment because it has a bearing on the showing of our "legal list" both as to volume and selectivity. Some of the shortcomings of this list are due to the fact that for many years we continued to rely heavily on railroad bonds to the exclusion of other types of issues, such as public utilities and industrials which investors generally were beginning to recognize and to like. It was not until 1928 that we admitted any utility bonds to our legal list and not until 1938 that any industrial bonds whatever came in, and then under this discretionary power which I have just mentioned. Yet for years before those two dates, investors generally, the rating agencies, and the market were considering as high grade and were accepting a substantial volume of public utility and industrial issues.

In 1928, for example, when we first admitted public utility issues, we had on our list at that time 40% of available railroad issues, but only 20% of available utility issues; yet the volume of the two outstanding was very nearly the same.

Do these proposals of ours mean that we have had any change of heart or have embraced any new philosophy as to the basic function of a trustee? They do not, and I mention the question only because of certain suggestions that have been made in some quarters in recent years that trustees should put less emphasis on conservation and strike out in the direction of bolder and more aggressive theories of trust management. Alluring as these suggestions may be, I hope I do not have to remind you that so far they have found no acceptance in the law of trusteeship.

I think we should remember, too, that a good deal of the emphasis on conservation that we have seen in the past, and many of the restrictions that have been laid on trustees are due simply to mistakes made in the past by those who have tried in their time to be too bold and too aggressive.

I recognize that a good many of these suggestions come from an understandable concern over the present low income from high grade bonds to which we are limited in New York, together with a concern over the current low purchasing power of the dollar. As a matter of fact, it is precisely this low income that is one of the major motives behind the proposals of our committee, but there are limits to what we can do.

I am glad Mr. Ayer is going to discuss this question of purchasing power, and I shall be listening with great interest, but I hope he will not object if I confess to him and to you that I have been a considerable sceptic as to what, if anything, can be done to protect any fund against these recurrent fluctuations in the value of money. Many efforts have been made, but, until now, so far as I can discover, no one seems to have found the magic formula. That, it seems to me, is why more than one voice has been raised in caution against accepting any ready answer to this age-old problem, and, again, that is why, in my judgment, in all the years in which the law of trusteeship has been developed, years in which we have seen fluctuations in purchasing power almost as wide as any witnessed in recent years, no obligation has ever been laid on a trustee to try to compensate for these variations in the value of money.

What we are trying to do in New York is simply to establish a more realistic approach to present-day investing. We want our methods and our equipment to keep pace with the development of our economy. We do not want to be tied to old and outworn theories.

Let me leave one final thought with you, a thought that will bear repeated emphasis, and one that I think has received some brilliant emphasis in a series of addresses over recent years by Louis S. Headley, of St. Paul, the past president of the trust division of the American Bankers Association, and, in my opinion, one of the most articulate men in the entire trust profession.

Defending this central idea of conservation, the thought that it is the duty of a trustee to conserve and to make productive rather than to create, in an address at the 1949 Midwinter Trust Conference, Mr. Headley resorted to Scripture in defense of the theory that the world needs both those who create and those who conserve. Some of you who know your Scripture better than I do may remember the words. I confess I had to look them up in the Book of Ecclesiastes, but they go something like this: "To everything there is a season and a time to every purpose under the heaven. A time to be born, and a time to die; a time to plant, and a time to pluck up that which is planted."

Expanding on that text, Mr. Headley went on to say that we need both types of activity and both groups of persons; neither need make any apology to the other.

It happens that trustees have always been classified, with good reason I think, among those who gather the harvest and store it in the barns, but the point we are trying to make in New York is that we must not store our harvest in old, or leaky, or inadequate structures, any more than those who cultivate should work with outmoded tools. We still classify ourselves among those who gather into barns, but what we are trying our best to do is simply to build a better barn. Thank you. (*Applause.*)

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Chairman Vultee: I think you will agree that the substance of Mr. Torrance's remarks has tremendous weight, and the study will have a major effect on the investment practices and statutes of this state and a great many others.

Our next speaker, Mr. Baldwin Maull, a very dear friend and associate of mine, has chosen the topic, "Discretionary Common Trusts as a Means of Handling Small Trusts." Mr. Maull—Baldy to many of you—supervised the creation of the first common trust fund in New York under the present law in 1944, and I think it is fair to say that he is probably the best informed man in New York City and in the state on this question of the discretionary common trust fund. Mr. Maull has been chairman for three years of the New York Bankers Association committee on common trust funds and also a member of the American Bankers Association committee on common trust funds.

Baldy, I think you were with Sullivan & Cromwell for ten years before you came over to the bank some fifteen years ago. Although Baldy is still very active in the trust field, he is spending a great deal of time on general banking with us. He is a director of the Lehigh Valley, and board chairman of the National Varnished Products Corporation. I think Baldy's experience is unusual and brings a business point of view in addition to the legal point of view to this question of the discretionary common trust fund. Mr. Maull! (*Applause.*)

* * *

Mr. Baldwin Maull: Thank you very much, Howard. Only an associate would have said some of the things that he said about me. I would like to correct one thing, and that is: I did not choose the subject; I was given the subject, and, as I wondered what aspect of the common trust fund would interest you gentlemen, I sent for last year's PROCEEDINGS of the Federation to see what went on at these meetings, and I found that your business was largely that of prediction. There were predictions on many subjects, many fields of business and securities, and predictions of bull and bear markets, and my impression, from reading the PROCEEDINGS, is that not all of those predictions have come true.

I decided that I should start by making a prediction on the common trust fund—that you will see in the next few years a bull market in common trust funds. I do not think I take very much risk in saying that.

I am going to ask a few questions of myself that will bring out what a common trust fund is and then give the reason for my prediction.

First, as to what it is—a common trust fund is simply a mutual investment fund for trusts administered by a particular bank. Trusts administered by that bank are the only shareholders, so to speak, in the common trust fund. They enter and leave the common trust fund at regular intervals, if they wish, at the market value of their participation, based on the assets or various securities in the common fund. There is no load of any kind such as you have in a mutual fund normally on entering. The participation of any individual trust in the common fund is now limited to \$50,000. It is not a means for large investing. It is only available for \$50,000 pieces from any one trust and is primarily designed for trusts that are not larger than \$50,000 or not much larger.

There is a hope on the part of a great many of the banks who are administering common trust funds that that \$50,000 limit will be raised to \$100,000 within the reasonably near future. However, that takes you into the field of legislation and into the political field, and I cannot say whether or not it will come.

The admission of trusts is limited to trusts for "bona fide fiduciary purposes." I mention that because that phrase in the regulations is a controlling phrase as to the investments that can be made. The common trust fund is not suitable for an average investor, for a person who has just \$25,000 and wants to know where to put it. He cannot, as a practical matter, just go in and take some shares in a common trust fund. If any bank admits trusts that are not for "bona fide fiduciary purposes," it will violate regulation F; that will constitute a violation of the internal revenue provisions concerning tax exemptions; the common trust fund will be taxed as a corporation, and I suppose that the bank which brought that on would have to pay the tax. So I do not think you need have any fear as to the type of trust that will be admitted into common trust funds.

WHY COMMON TRUST FUNDS?

Why are there common trust funds? Many reasons can be given, but there are two controlling reasons. (1) It permits a much wider diversification of investment than would be possible for an individual small trust. The risk is scattered, and, corresponding with that diversification, the income is usually greater in a common trust fund than it would be in a separately invested small trust. (2) And perhaps this is the compelling reason, it saves the trustee a very considerable expense. I could not say exactly what a small trust is because different banks have different views as to what are small trusts. Some banks, I believe, consider any trust of less than \$100,000 so small that it is not worth taking, that they will lose money on it at the present fees, but, no matter what the views of the bank may be, if they pool the operations from the investment point of view, they are bound to save money as against the many transactions that take place and the many accounting entries and the handling of many securities in a great many scattered, separate, individual trusts.

There have been estimates, but no exact estimate is possible, of savings that range from 25 to 66 2/3% in the operation of the trusts as between their operation with separate investment and their operation with investment through the common trust fund.

Now, how is the common trust fund itself invested? It is invested like any large single trust. There are one or two differences. When you have a large single trust, usually the beneficiaries are quite interested in tax-free investments. That is not true in the common trust fund because small trusts are the income beneficiaries. Also some of the large trusts may be more interested in growth of their principal through the stock investments than in the dividend return. That also is not true in the common trust fund because the beneficiaries of small trusts are vitally interested in continuity of a very good income.

There are just as many policies and ways of investing a common trust fund as between different banks that run them as there are of investing individual trusts. The state-

ments of the common trust funds show wide differences. There is even one that is investing only in preferred stocks. Most of them have a diversification as between Government bonds, other bonds, some preferreds and common stocks, with some high and some low percentages in common stocks.

HOW IS THE FUND SOLD?

How is the common trust fund sold? A great many people in the securities business have asked me if it is not competitive with investment trusts. They think of a share in the common trust fund as being sold. It isn't sold at all. It is only available to the trusts for which the bank that runs the common trust fund is trustee or cotrustee. It is not permissible to the bank to advertise the common trust fund as such. It can advertise for small trusts and indicate that it is better able to handle them because it has a common trust fund, but it cannot advertise the fund itself.

There are some rather peculiar legal limitations on advertising. It is unlawful for a bank to advertise or publicize the earnings realized on any common trust fund or the value of the assets thereof. So it is impossible to make comparisons publicly between funds. It is also a requirement that banks shall not publish or authorize the publication of any such report—meaning its annual report to beneficiaries—or the information contained therein, and each copy furnished to any person must bear a statement to the effect that the publication of such copy or the information contained therein is unauthorized. That is the only case I know of in which a very large amount of money is invested on an almost public basis and the Government, instead of requiring great publicity, precludes it—a very unusual arrangement.

Now what is the analyst's relationship to a common trust fund? The bank analyst has the same relationship to the investments made by the common trust fund that he does to the investments made by any large trust administered by that bank, with one important exception. A large group of people, the beneficiaries of the trust, all the officers of the bank as a rule, and the directors, will know that that investment has been made, they will see in print when it was made and what the cost was, and so the analyst will have to stand on his record, whereas in an individual trust case far less publicity is given to the fact that the bank made the investment on his recommendation.

What is his relationship to the fund itself? The general analyst who is not employed by a bank cannot have very much of a relationship to the fund. For the reason I mentioned—the regulations of the Federal Reserve Bank and the New York State Banking Board—he cannot get copies of the different bank reports and compare them and tabulate them in the way that Arthur Wiesenberger does for investment trusts, for example. He has just got to leave it alone, as I see it. However, the analyst within a bank that has a common trust fund can do that for his own information and his bank's information, because it is customary for the banks having common trust funds to exchange information in their annual reports in spite of this regulation.

Coming back to my prediction, and my time is almost expiring, I will say, first, that I would like to give you a minute of history. Back in the 1920's it was quite common for

banks to have mortgage pools and to allot participations in particular mortgages or in mortgage pools to trusts and even to transfer them among the trusts, and a number of banks also had mingled funds very like the present common trust funds, including City Farmers, one of a number in New York. The mortgage results were so bad that mingled investment in general was stopped by law in New York State. It was only in the late 1930's that the principle of the common trust fund was accepted in the law, which was then completely impractical in its terms, and it was only in the early 1940's that the law was changed so as to permit in a practical way the common trust fund in New York. It had been taken up again in Philadelphia in the late '30's. Starting, I believe, with the Girard Trust Company, a number of banks there formed funds. Ours was the first in New York in 1944, I think it was, and steadily from that time on other banks have formed funds. They have been growing as they found the time to turn their smaller trusts into the common fund. You now have, according to the latest figures I have seen, about \$52 million invested in common trust funds in New York State. Quite a number of the larger banks have only gone into it within the last year or so and have not by any means, as they tell me, transferred to the common trust fund all their existing trusts which might have a common trust fund investment as against the individual investment.

Recent figures in Pennsylvania show that they had last year \$219 million in common trust funds. I have no doubt that the New York figure will grow very materially over the next two or three years. I also have no doubt that this form of investment for trusts will spread widely over the country. It cannot fail.

QUESTION OF LITIGATION IN N. Y.

There is one question of litigation involved in New York which is now before the U. S. Supreme Court—it might be decided any day—that might cause some mechanical problems, some changes in the laws, but the institution is so well set that I am satisfied it will go ahead rapidly, regardless of the litigation.

A few years ago, the American Bankers Association made a country-wide study of trusts administered by 868 trust institutions. They covered 144,081 trusts, of which 35,599 were in New York. A total of 54% of those trusts had an annual income of \$1,200 or less, with an average income of \$370. A total of 73% of those trusts had an annual income of \$3,000 or less with an average income of \$788. In New York, which you think of as a place of settled wealth and large trusts, 67% of the trusts had an annual income of \$3,000 or less with an average income of \$960. As you can see, most of those trusts would be candidates for investment through a common trust fund, either of the discretionary type or limited to legal investments, whatever rule may apply to the trusts.

So, although I believe that the common trust fund is primarily a mechanical device for better investment rather than a security matter of primary importance to you gentlemen as analysts, I still think that the concentration of investment in common trust funds within the banks will cause them to give in many cases, at any rate, much more careful study to individual securities and less time to individual

trusts and should result in improvement in the general standard throughout the country of trust investment. (*Applause*)

* * *

Chairman Vultee: Thank you very much, Baldy. I would just like to make an observation. I have traveled around this state a great deal lately, also around the country. In the last decade there has been quite a change in the trust investment policies of many banks. There is a much more realistic and aggressive attitude.

Our next speaker, Hazen H. Ayer, has chosen the topic, "Should Trustees Attempt to Protect Purchasing Power?" I have known Hazen a great many years. He is head of the investment counsel firm of Standish, Ayer & McKay, of Boston, and has spent a great deal of his time in recent years on trust problems. Hazen is trustee of about fifty trusts. He is director of two New England insurance companies. I know he was president of one but had so much to do that he finally thought that was a little too much. Also he is a director of the Franklin Savings Bank. We thought Hazen could bring to us a little different point of view in that he is from Massachusetts where the "prudent man" concept holds sway. (*Applause*)

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Mr. Hazen H. Ayer: Thank you, Howard. Ladies and gentlemen: I might say the same thing Mr. Maull did here. I did not pick my subject. It was handed to me. Those of you who read John Marquand and Cleveland Amory and other such authorities on Boston society know what to expect of Boston trustees. You must, of course, be a member of one of the first families, brought up in Boston society, live in Beacon or Back Bay, and you must be a graduate of Harvard. At the risk of disqualifying myself, I must say I have no such qualifications.

Unexpected change in the investment environment and limited visibility are not new. Rather, they are handicaps which have been faced by successive generations of investors. It may be, however, that historians of the present period will agree that seldom, if ever, have political and social changes of such sweeping importance been concentrated in so short a space of time. In our own country the past two decades have brought a transformation of significance to all citizens, and it is unnecessary to add that the end of such changes cannot now be seen.

These conditions present a special challenge to investment managers whether they act as trustees, officers of financial institutions, or just as private investors. One of the great problems is the one that is illustrated by the subject of the present discussion. There has indeed been a deterioration of investor purchasing power in recent years, a deterioration that has fallen with particular force on the beneficiaries of most trust funds. We are all familiar with this three-way squeeze resulting from lower interest rates, higher taxes, and higher living costs. These developments can be illustrated by rough figures showing the effective current buying power generated by a \$100,000 trust fund invested exclusively in high grade corporate bonds. In the accompanying table 1929, 1939, and 1949 are taken as separate sample years, and it is assumed that the benefi-

cary is a Massachusetts resident, single, without dependents, and with no other source of income.

This unfortunate drop in purchasing power has of course been due to several developments. The direct and indirect cost of financing World War II is by itself a paramount factor. But there have been other fundamental factors at work, such as the increasingly powerful and expensive roles played by Federal and other governmental bodies, and the inflationary implications of a national budget which has been run at a substantial deficit in sixteen of the past nineteen fiscal years. Among these forces should be included the current social-political tendency to reallocate national income in a way that favors the wage earner over a person of wealth.

	1929	1939	1949
Principal	\$100,000	\$100,000	\$100,000
Over-all yield	4.92 %	3.28 %	2.77 %
Income	\$ 4,920	\$ 3,280	\$ 2,770
Income after taxes	4,613	3,012	2,253
Income in 1929 dollars	4,613	3,720	1,630

Assumptions:

Portfolio invested wholly in corporate bonds—50% in Moody's Aaa, 25% in Aa, and 25% in A.

U. S. Department of Labor *Consumers' Price Index* is used to reduce disposal income to 1929 dollars.

However these causes may be listed or weighed in our analysis, it seems extremely doubtful that we can expect to see an important reversal of these trends over the years immediately ahead.

If these assumptions about the current situation are correct, we then come to the question: What can the investor, or more particularly the trustee, do about it? First, it will probably be agreed that bonds have not been and are unlikely to be a hedge against a depreciated dollar. Their usefulness, as great as it is, lies in other directions. In theory, and to some extent in practice, the more useful hedges available to the individual investor or speculator have been commodities, various types of real estate, and common stocks. For the purpose of this discussion it may be assumed, I believe, that in choosing among these alternatives the average trustee will turn to stocks rather than to the direct ownership of physical assets. No one can say that stocks in the aggregate have proved to have been a perfect hedge in protecting purchasing power against recent developments, but to date carefully selected stocks have provided some protection in terms of both principal value and income. With stock prices close to the high of the past nineteen years, and with stock yields still double those available from top grade bonds, I think it is safe to take this generalization as a fact rather than try to present at this point the supporting evidence.

Granted, then, that stocks have been and seem likely to be the most practical investment medium the trustees can use in protecting purchasing power, we still have two remaining questions: (1) To what extent can stocks be used? and (2) To what extent should they be used for the average conservative trust fund?

In answering these questions every trustee must consider various restrictions, the most important being the laws and practices in the state having jurisdiction, and the limita-

tions, if any, imposed by the trust indenture under which he operates. So much has been written and said about the "prudent man rule" that has operated in Massachusetts that it seems unnecessary to describe the regulations as they apply in that state. It may suffice to say that in Massachusetts it is common practice to invest as much as 40 to 50% of the average trust fund in common stocks, and I know of trustees, both private and corporate, who do not hesitate to go to 60% in stocks when it seems desirable to do so. The arguments for such policies have been rather fully set forth by such contemporary spokesmen as Mr. Mayo A. Shattuck and Mr. Richard P. Chapman, with whose opinions you may be familiar.

Operating under such rules, it has been possible, although not usual, to do a remarkably complete job in hedging against depreciation of the dollar. I am familiar with one group of trusts where the principal value today is over 400% of the amount paid in by the grantor in 1934. These funds were set up at that time as part of an individual family investment and estate planning program. The trustees were given extraordinarily broad powers in the original indenture, and the exculpatory clauses designed to give protection to the trustees were unusually strong. The operation of the trusts has involved occasional borrowing and partial accumulation of income, all as provided in the indenture. The results, which are based partly on good fortune as well as investment skill, should not, I am sure, be taken as a criterion.

If I may draw from my own experience, I should like to give a better illustration of what I think the prudent trustee, 1950 model, can do and possibly should expect to do, assuming that his state laws and his trust indenture give him reasonable freedom of action.

The example I am taking is a substantial family trust fund which has been in operation for nearly forty years. My own association with the fund, first as an investment adviser and more recently as cotrustee, extends over a period of sixteen years. In practically all respects it is a conventional trust which has been operated in a conservative manner, at least as judged by Massachusetts standards. All income has been paid out, and there have been no additions to principal, so that the figures on market value are directly comparable from year to year. Appraisals have been made semiannually in April and October, the most recent one being that made October 1, 1949. The result at that time provided an opportunity to make some interesting comparisons on the longer term performance of the fund. We found, for example, that the general market as measured by either the Dow-Jones or the Standard Statistics industrial averages was at almost exactly the same point that prevailed when a semiannual appraisal was made in April 1937, twelve and a half years earlier. For this period, however, the fund in question showed a net gain of 24.3% in market value. Total income did not increase proportionately, primarily because the fixed income part of the fund, reflecting the tax status of present beneficiaries, has been invested almost exclusively in state and municipal bonds. The rate of return from such securities dropped sharply from 1937 to 1949, so that, even with higher dividends from common stocks, income from the trust increased only 8% from 1937 to 1949, using calendar year totals. The

net effect, however, has been to give beneficiaries some degree of protection against both higher living costs and higher taxes. Although the trustees have not regarded these results as remarkable, it has been some satisfaction to find that for this period the over-all performance of the fund was superior to that of most leading investment companies, in spite of the fact that these companies had carried a very much heavier position in common stocks.

The principles which have been used in the management of these funds are those that are presumably accepted today by most experienced managers of conservative funds. There was, first of all, an emphasis on the balanced fund approach. It was considered just a matter of good sense to have a balance between equities and fixed income securities, and to sell stocks on balance when market prices appeared to be relatively high so that equity purchase could be made when better values were available. The percentage in common stocks, taken on appraisal dates, never ran above 55 or below 38%. Thus, although timing and price levels were regarded as important considerations, shifting from bonds to stocks or the reverse was never carried to extremes. Selection of securities was considered of at least equal importance, and a study of individual holdings shows that a majority of the largest stock investments turned in a better than average performance. Having seen these methods successful in practice, I am naturally prejudiced in their favor. In fact, I know of no sounder procedure now available to either the trustee or the private investor.

In the discussion of general policies over recent months there has been a feeling among these trustees that the inflationary trend in the United States, or at least the trend toward an unbalanced budget, has become chronic. Some allowance is being given to this fact. The position in common stocks, which is now regarded as normal, is possibly 5 to 10 percentage points higher than it would have been otherwise. This is a practical way of saying that stocks may be useful as a hedge, and within limits trustees should give some weight to current inflationary trends. I find that similar opinions are not uncommon among Boston trustees.

At this point someone may ask, and not illogically: "If a moderate increase in stocks is good as an inflation hedge, why should not a very large increase be better?" It could prove to be. I would personally argue against a radical change in this direction for several reasons which I regard as important.

In the first place, it can hardly be denied that a substantially larger common stock position as compared with high grade bonds does increase risk. This statement applies to both stability of current income and safety of principal—and for trustees with their special responsibilities this is an important consideration.

Second, it is not clear that stocks are at all foolproof as inflation hedges. Over a period the value of a stock is determined by the ability of the company to show earnings and pay dividends. It is this ability that will count rather than any theoretical estimates about the cost of replacing the company's physical assets. And earnings can be estimated intelligently only if one knows what the rules of the game are going to be. Government regulations, taxes, competition, and labor costs all enter into the equation. Those who are convinced that stocks are a real inflation

hedge might do well to study the situation in Great Britain where the cost of a "welfare state" and the practices of a labor government have been demonstrated. Since the end of the war in August 1945, there has been a sharp devaluation in the pound and an increase of over 40% in the wholesale price level, but British industrial stock prices have actually decreased in value by about 10%—and this at a time of full employment.

Finally, we must ask ourselves some rather fundamental questions about what the functions of a trustee should be. Mr. Louis S. Headley, president of the First Trust Company of St. Paul, has argued with considerable force and eloquence that the primary and by far the most important duty of the trustee is to conserve dollar values rather than increase principal or income by adopting aggressive and possibly risky management policies. There is much to be said for this viewpoint even if, as I believe, we should not accept it unconditionally. It should be clear to all of us that, if trustees as a group do accept unusual risks and through inexperience, poor judgment, or bad fortune do lose principal which has been entrusted to them, the repercussions will be most serious and unfortunate, not only for trusteeship as an institution but also for the capitalistic system as a whole.

From these comments you already know the kind of answer I would give to the question that was posed at the outset. The developments that have been mentioned present a challenge which will call for imagination, careful study, and hard work. A trustee should try within limits to preserve or protect purchasing power and perhaps take some extra risk thereby. In meeting this difficult challenge, however, he should not forget his primary duty to conserve the funds that have been entrusted to him, and, unless there are new and convincing reasons to do so, he should not abandon what most present-day investment managers would regard as orthodox policies.

* * *

Chairman Vultee: Thank you, Hazen. Listening to these various points of view, I cannot help but recite my own experiences. During the war period, I was disposed to remark that a high grade bond or cash was about the worst investment one could have, and more recently I have been tending to observe that common stocks, with all their faults, have certainly been a better investment over the last decade than fixed income securities and that I thought over the next decade the same thing would be true. Whenever I make that remark, I find myself in the awkward position of having the particular client say, "Well, why aren't we 100% in common stock?" I couldn't help but chuckle when Hazen, after going all out for common stocks, backtracked a little again to include bonds. The need of bonds in portfolio is a very hard thing to explain at times.

We will have about a half-hour for questions from the floor.

Question: Mr. Torrance, approximately how large is the total amount of funds tied up presently by the New York "legal law" of which, if these new proposals go through, 35% might eventually be invested in common stocks?

Mr. Torrance: As you know, there are no official figures as to the total volume of funds or the total number of trusts

in the state, but I can give you some indications. In this committee (as we mentioned in our report, and some of you may have heard me say before in discussing this job) finding that there were no figures and trying to get some measure of what our problem was, we took the 16 banks on our committee and made a test from the accounts that those particular banks handled. Those 16 banks include 10 in New York City and 6 upstate. Obviously, those are not all the banks, but if you put in 10 of the larger New York trust companies you are going to get a sizable portion of the total volume. Those 16 banks handle about 20,000 individual trusts and accounts for close to $4\frac{1}{2}$ billions of dollars of trust funds. Out of that volume, we found probably \$800 million limited to legal investments. Now, bear in mind that that does not include all banks, and it does not include individual trustees. I do not know exactly what is behind your question, but other people have asked me the same question. If it is directed toward the volume of funds that might be put into the stock market, I think we ought to remember that that will not happen overnight, and this area we are suggesting is permissive. Some trustees will use it to the full extent; some will use it probably not at all; others, to a very moderate extent; so that any inflow of funds from that source into the stock market would take place over a very gradual period.

Question: Just following that up, do you lay down any statistical standards for your common stocks?

Mr. Torrance: That is an interesting question. We do not. It is interesting to me because those who insisted that we stay tied to the statistical formulas in corporate bonds permitted us to abandon them in common stock area.

Question: Mr. Maull, could you tell us from your experience about how large the funds should be in a common trust fund before they can break even on it?

Mr. Maull: There is no sure answer to that. It depends on the costs of the particular bank. Your question also would suggest that the banks were going to start out fresh and get new funds. The way the question of course comes up is that the bank has a certain amount of business, and they look over the smaller cases and find those cases that can be converted to a common trust fund investment. I think that you can save money by having a common trust fund as against the cost of separate administration at a very low figure. It might be a half million dollars or a million dollars. Going back to your question, however, if you were going to start a fund with the idea of getting business and making money out of it, it might be \$5 million.

Question: I was thinking of the individual account. The reason I asked is I heard some banker from a Connecticut bank say that they thought they could break even by accepting an account of \$10,000 in their common trust fund. They had gone through a very elaborate cost accounting system, and it seemed awfully low to me. I wonder if you could give us a rough idea of what you think.

Mr. Maull: We take \$10,000 accounts for our common trust fund. We take them without knowing whether we break even or not because we are offering ourselves to the public as prepared to handle small trusts, and we feel we must. We don't think that we lose any substantial amount in handling them. We don't make anything on them.

Question: What is the common practice where the com-

mon trust fund is used? Do you put the entire proceeds of the trust in the fund or part of it or have any formula for that?

Mr. Maull: It varies in my experience and from the experience of those with whom I have talked. You begin by looking at your existing trusts, and each trust is a separate problem. In the first place, you have to be sure that the investment provisions are such that it can invest in the common fund. Then you look at each security, and you may have particular securities there with a very low or a very high tax base, so that, from the point of view of that trust, you do not believe it would be right to sell that security even though you would like to see the trust fully invested in the common fund. There may be securities that you think are especially depreciated where you have a high cost, and you think if you hold on to them you will make that cost back. There may be securities that have a historical or sentimental relationship to the family.

Subject to those qualifications, I believe each bank tries to put all of a particular trust into the common trust fund. You also have to look at the income. If the income beneficiary is living on the income of the trust and is accustomed to a particular income which is based, let us say, on heavy holdings of A. T. & T., and you don't think your common trust fund will make as much, you may hold A. T. & T. and put the rest in. There is an infinite variation in the way it goes, but you would like to put everything in up to \$50,000.

There is also a variation in policy as to the extent to which parts of larger trusts are put in the common trust fund. Some banks do it and some don't.

Question: Mr. Maull, what percentage of common stocks are ordinarily invested in your common trust fund?

Mr. Maull: I don't think you can answer the question with the word "ordinarily" in it. Each bank has its own policy. I have seen statements where 50% are in common stock, and I have seen some where none is. In our own particular case, at the moment, we have 40%.

Chairman Vultee: I think I might add that one of the larger banks in New York started a common trust fund a month or so ago. They started with 50% common stocks. I think that the answer lies in the historical investment attitude of the bank that is involved. I know some banks that are historically very conservative that are very low in their common stock ratio. I do not think I have seen any over 50%, have you, Mr. Maull?

Mr. Maull: I haven't either.

Question: Mr. Maull, I should like to know the purpose of the advertising restrictions on the comparison of common trust funds?

Mr. Maull: I would say there is a dual purpose. A great many banks in the late 1920's and early 1930's were affiliated with underwriting and with investment trusts to their sorrow. The Federal Reserve authorities do not want to see that happen again. There are restrictions in the Federal Reserve Act which prevent a bank from having affiliations with either underwriting or investment trusts. I believe the banking authorities believed that, if there were free rein for advertising, there would be a great temptation to convert the purpose to the solicitation of new accounts which were really investment rather than trust accounts.

I am just giving my guess as to what the authorities have in their minds, but I have talked to some of them about it. I believe the banking authorities fear a competition among the banks for trust results. They fear that, if wide publicity were given to the yields, there would be an undue straining to produce a higher return than could be justified with safety, or, if there were wide publicity as to profits, there would be an undue straining on the part of banks to produce profits. Therefore comparative publicity as to results would lead to less conservative investment than the banking authorities would like to see.

Chairman Vultee: Bascom, I think you had something you wanted to explore momentarily here.

Mr. Torrance: I wanted to add one word to the question that was asked here about the requirements of stocks. The requirement is that they must be stocks fully listed and registered on a National Securities Exchange. The purpose of that is not that that insures quality but it does insure the availability of the information you should have in judging those stocks.

Question: That would rule out bank and insurance stocks?

Mr. Torrance: No. We accept bank and insurance stocks. *(Laughter.)*

This draft has been redrawn I guess about six times, and all those details have finally been worked into it. It may interest you to know that we had quite a battle over that acceptance of bank and insurance stocks, and at one stage of the game one of the very influential persons in the state wanted us to exclude bank stocks.

Chairman Vultee: As for this matter of the legal list, I was a senior financial officer for one of the large insurance companies in Hartford. We had laws up there that gave us quite a little leeway. We could not buy any industrial stocks, but we could buy railroad stocks. It is just a queer quirk that the law developed that way, and it doesn't make much sense.

Question: If they should pass the bill requiring the same information be given on over-the-counter securities as at the present time on listed securities, would there be a provision incorporated in the bill?

Mr. Torrance: No, it wouldn't be necessary. This provision would cover anything that is registered.

Question: I see—it is registered rather than listed.

Mr. Torrance: Fully listed and registered. Unlisted trading doesn't count. It is both listed and registered.

Question: Then it would rule out all unlisted?

Mr. Torrance: Unless they are brought in.

Question: Mr. Maull, is there any difference between the charge against the state in the common trust fund and the charge against the large fund that the bank may manage, and what are the charges?

Mr. Maull: The trustee is not permitted to make any charge for its services against the common trust fund. It continues to charge the individual trust on the statutory rate or the agreed rate, but it simply substitutes its management of the common trust fund as to investments and accounting for the management of the separate investments and the accounting with respect thereto in the individual trusts. Small expenses are charged against the common trust fund, there may be some accounting or legal question,

and there is an accounting every three years, but only things of that sort.

Chairman Vultee: Mr. Maull is on the board of a mutual investment trust, and so he sees both sides of this problem.

Question: Mr. Maull, it has been suggested that the small out-of-town banks might be permitted to use the common trust fund of a New York City bank, the way the proposal has been made. I wonder if I could have your comments on that, or whether you believe it might be more desirable for the out-of-town bank to run its own fund, perhaps with investment help from the New York City bank?

Chairman Vultee: May I add, before Mr. Maull answers the question, that in the Marine Midland—I guess we are about the seventeenth largest bank in the country—we have the problem ourselves with our 19 banks in the state, and some of them too small to have their own trust departments. It would help if we could center that type of work in one bank.

Mr. Maull: I have a special interest because the Marine Midland of New York is one of 19 banks throughout the state; some of them are too small to have a separate trust department; some of them have small departments, and they may have one man running the department and maybe only half time. That is true all through the state. If you are going to have a common fund in a bank that has just one man doing everything, he cannot do a job to meet the standards of you gentlemen on the investment side. On the other hand, there may be enough trusts in that bank to justify a fund. If there is only one man, it is pretty hard for him to keep up on the technical requirements of the fund, to keep himself straight on the legality. I would like very much, from my group's point of view, to see the possibility of having a combination of these common trust funds.

When you get outside our own group, where we work in some intimate relationship—Howard, for example, has a department which advises the trust departments of all our banks; I have been chairman of the trust policy committee for all the banks—when you get outside of that, you have completely independent, unrelated banks, just a correspondent relationship to lean on, and there also I believe it would be an advantage in many cases if a smaller bank could transfer its trust investment problem to the correspondent. It is a suggestion that was originally made by Al Whittlesey, the chairman of the American Bankers Association committee in Philadelphia. I repeated it at our New York State meeting. Nothing practical has been done about it, and nothing will be done for some time, I think, because other more pressing problems are before the groups working on the common trust fund.

I do think it would be a difficult competition among the metropolitan banks as to which correspondent would handle the common trust fund problems of their country banks. I just do not know how that would work out or how the compensation would work out. It is in a very nebulous, tentative form, but I do believe that over the years something will come of it.

Question: To elaborate on the fee question, is any problem presented when there are other trustees in addition to the bank in connection with the fee?

Mr. Maull: When there is another trustee, that trustee must consent to the investment in the common trust fund. In New York at any time that cotrustee can request the investment be withdrawn, and on the next valuation date the participation of the trust in which he is cotrustee is sold out and returned to the individual trust, but its investment in the common fund makes no difference whatever as to the division of fees because the only fees that are paid are the fees paid by the individual trust which are on a statutory basis.

Question: I understand that, but is not the cotrustee being paid for duties which he has delegated to the bank to a great extent?

Mr. Maull: Well, to some extent, but, after all, he watches the results of the common fund, and, if he doesn't like it, he forces the bank to take the trust out. He has that responsibility still.

Question: He is being paid as much as the bank, isn't he?

Mr. Maull: You are talking to a bank man, and you cannot get any argument from me. In many cases we think he is not entitled to as much as the bank trustee.

Question: Anyway, there is no legal difficulty?

Mr. Maull: There is no legal difficulty.

Question: I would like to ask Mr. Maull what legal authority there is for transferring series G savings bonds to the common trust fund at par?

Mr. Maull: There are some practical difficulties because what is a G bond worth when part of its term has expired? Should it be valued at a discount because if you wish to cash it in it is at a discount, or should it be valued at a premium because if you bought a Government obligation of the same maturity you would pay more? A decision by a New York surrogate was confirmed on appeal that a G bond is the same as cash and can be transferred at par from an individual trust to a common trust. There is also a ruling or something from the Treasury that permits that transfer to be made as an exception to their general rule, that G bonds must be cashed if there is any transfer.

Chairman Vultee: We have time for only one more question. Make it a good one, whoever is going to be recognized.

Question: Mr. Maull, is there any difficulty about the difference in the status of the various trusts, that is, the beneficiaries or the remaindermen—I think that is the term in the trusts? For instance, the widow has a different kind of investment from the young businessman going up. Then there is a question, isn't there, of current income and capital appreciation between the various beneficiaries which varies from trust to trust?

Chairman Vultee: I think Mr. Maull covered that question before.

Question: Do you mean that the individual trustee can make up his own mind whether to go in or not?

Chairman Vultee: That is right. If we find funds, for example, as Mr. Maull said before, that have special requirements, then these have to be weighed as to whether they should go into a common trust fund.

This has been a very interesting session to me. I hope it has been to you fellows, and I want to thank these gentlemen. (Applause.)

Railroad Forum

THURSDAY MORNING, MARCH 2, 1950

PIERRE R. BRETEY, Baker, Weeks & Harden, New York, presiding.

Chairman Bretey: Ladies and gentlemen: I welcome all of you to this, our third railroad forum. Those who are from out of town may be interested in what we do in the New York Society with respect to rails. We try every two weeks or thereabouts to have an official of a railroad come and speak with us about the prospects of his particular road, with emphasis on his gross additions and betterments, his traffic prospects, and so on. From time to time we have technical men as well. Among our speakers have been Charlie Kerr of the Westinghouse Electric Company and also Burt Anderson of Union Switch and Signal Company. Sometimes we have managed to get them, as today, from the New York Railroad Club. We hope that those of you from out of town who may be in New York on our meeting days will attend our rail forums, and I extend you a hearty welcome in behalf of the New York Society.

May I take this opportunity, if only to crib on the speakers for half a minute, to review our two previous forums. The first one, which was held two years ago, included among its speakers Herb Wyeth, Arthur Jansen, Charlie Bergman, and myself. At that time I emphasized the financial progress made by the railroad industry. Herb emphasized the importance of selectivity. In retrospect, how right he was, because we know over the past several years what has happened. We have seen Pennsylvania and C. & O. and a lot of other favorites fall by the wayside and a lot of newcomers come up, like KSU and Chicago Great Western. Arthur Jansen emphasized the savings from Dieselization, and Charlie Bergman as moderator co-ordinated the conflicting viewpoints advanced.

Last year Herbert Wyeth sponsored a "meet the press" type of meeting. He was the chairman, and his speaker was Bill Wyer, who among his numerous accomplishments has been the chief executive officer of the Jersey Central. Bill is now employed in probably the most difficult job of his entire career: namely trying to make a first class railroad out of the Long Island. There were several individuals selected to ask Bill Wyer questions. Time for questions however was all too short. Those of you who were there, may remember that Larry Stevens, Les Shaw, and Walter Hahn were selected for that purpose.

Today we thought we would like to go back to the policy followed two years ago of having a panel of four speakers. We will try to limit our speakers to about twelve to fourteen minutes each, so that we will have plenty of time for questions from the floor. I think you will agree when you look at the program that we have a real array of talent, ranging from the editor of the most important railroad trade publication to an official of one of the important class I carriers, with two of our own members occupying a major position in the day's activities.

Some months ago I had the pleasure of hearing Jim Lyne talk on truck competition at the New York Railroad Club. After him came Perry Shoemaker as presiding officer whose comments were of unusually high order. I think that Jim Lyne's talk is of such importance that all of those who have not heard it should write to Dave Pye of the New York Railroad Club, at 30 Church Street and get a copy. I think it is very much worth while, and I am sure the New York Railroad Club can stand the drain of a few extra copies.

It seems logical, therefore, that your chairman should invite these two gentlemen to be with us this morning, and you will hear them shortly. Our first speaker will be Frederic Uhrbrock. He needs no introduction to you, I am certain, for he has been one of our railroad mainstays for many years. We have appeared together on many programs of this type. Sometimes we have agreed. At other times our views have been divergent, but his ideas are always stimulating. Currently Fred is the railroad analyst for Vilas & Hickey.

It gives me great pleasure to introduce to you Fred Uhrbrock, who will discuss the improved finances of railroads. (*Applause.*)

* * *

Mr. Frederic Uhrbrock: Thank you, Pierre. Ladies and gentlemen: When our chairman first asked me to come up here and talk on the subject of the improved financial position of the railroad industry, my inclination was to give a very flat but firm refusal, for I know of nothing more boring than to have to sit and listen to somebody talk about figures, rattling them off at length.

Now, I like figures. I like to play around with them, but I have much more fun when I do it in my office or elsewhere. (*Laughter.*)

Most investors all too often think of our railroads as one cohesive unit. Opinions concerning individual securities are often flavored by a reaction to or a prejudice against the industry as a whole. As much as we, as individuals, may be irked by loose comment, we must realize that the hard, cold facts of the strength and progress of the industry are too often submerged by a welter of unfavorable publicity, especially if a rate case is before the Commission.

CHANGES IN 20 YEARS REMARKABLE

The financial changes that have occurred in the past twenty years are quite remarkable. At the end of 1929, which was a top year in railroad earnings, the class 1 roads reported net current assets of \$517 million, a total that did not include \$277 million of tax liability. The net position, as we now calculate it, was \$240 million, of which \$71 million was short-term loans payable. Unmatured funded debt amounted to \$11.5 billion. Fixed charges totaled \$681 million. As of December 31, 1948, net current assets amounted to \$1.6 billion, an increase of \$1.4 billion from 1929; funded debt to \$8.5 billion, a decrease of about \$3

CLASS I RAILROADS
Dollars in Millions

	12-31-29	1936	12-31-48	12-31-49
Net current assets, adj.*	\$ 240	D\$ 833	\$1,609	E\$1,200
Fixed charges	680	653	425	422
Funded debt	11,467	11,240	8,522	
A&B road & struc., 10 prior yr	N.a.	2,890	2,212	
A&B equipments, 10 prior yr	N.a.	1,618	3,824	
Funded debt to operat. rev.	\$1.83	\$2.77	\$0.88	
Fixed charges, % maintenance	33.06%	42.78%	13.94%	
Fixed charges, % net cur. assets	283.33%	435.65%	26.43%	
% Operations to net. op. inc.†	19.94%	17.94%	15.00%	
Fixed charges, % operat. rev.	10.84%	16.12%	4.40%	

*NCA adjusted to include tax liability in current liabilities in 1929 and 1936 to conform with ICC accounting subsequent to 1940.

†Before taxes.

billion from 1925; and fixed charges to \$425 million, a decrease of \$255 million, about 40%.

Many factors were involved in the basic change in position. It is not my purpose to discuss them in any detail in this paper, which is concerned only with the financial position of the industry and any collateral data that might pertain to the over-all strength of the industry.

The change in position, 1929-48, \$1.4 billion increase in net current assets, a \$3 billion reduction of debt, and a 40% cut in fixed charges, is quite a change for the better. Static figures above are interesting, but unless supported by collateral data might not mean too much.

FUNDED DEBT

Funded debt of \$8.5 billion consists of \$6 billion of fixed debt, \$1 billion of contingent interest, and \$1.5 billion of equipment obligations. Aside from refunding and reorganization, practically no mortgage debt has been issued in the past ten years, even though the roads have spent \$2.2 billion on additions and betterments to roadway during that period. Outstanding equipment obligations have increased sharply in recent years, but the increase of \$1,003 billion in the past ten years is more than balanced by \$3,824 billion of additions and betterments to equipment. Thus, \$6 billion has been put into the properties in the last ten years—an amount equivalent to about 80% of fixed debt now outstanding.

REDUCTION IN FIXED CHARGES

The reduction in fixed charges from \$680 million to \$425 million is a definite financial gain for the industry, but its significance is heightened by collateral data. In 1929 fixed charges were 2.8 times the amount of net current assets. In 1936 the combined balance sheet statement reported a net current deficit of \$593 million, and a deficit of \$833 million, including tax liability. In that year, however, current liabilities included substantial amounts of interest and debt in default. In 1948 net current assets were 4 times the amount of the fixed charges and, if reserve funds above the line were included, the current ratio would be lifted to 4.47 times charges. In other words, net current assets would have paid interest charges for about four months in 1929, but in 1948 they were large enough to pay interest for four years.

Another measure of the importance of the reduction in

fixed charges is the relationship between the per cent of operating revenues brought down to net railway operating income before Federal income taxes and the ratio of fixed charges to operating revenues. In 1929 the rails carried 19.9% of revenues down to adjusted net railway operating income. Fixed charges took 10.8%. In 1936 the ratios were 17.9% and 16.1%. In 1948 they were 15.0% and 4.4%. In other words, the changes in revenues and charges raised coverage of charges from operation only from 1.8 times in 1929 to 3.4 times in 1948.

MAINTENANCE EXPENDITURES

Still another measure of the importance of the reduction in fixed charges is the relation to maintenance expenditures. In 1929 fixed charges were equivalent to 33% of maintenance expenditures; in 1936 the ratio had increased to 43%; but in 1948 it had declined to about 14%. To put it another way, the rails on the basis of 1948 figures could cover fixed charges by a 14% cut in maintenance. In 1929 it would have required a 33% cut. The former is within reason—the latter impractical.

COMPLETE FIGURES NOT AVAILABLE

Complete figures for 1949 are not yet available. The results, because of the decrease in revenues attributable to strikes and inventory liquidation, will not be so good as for 1948, but still vastly superior to those of 1929 or 1936, in many respects.

The industry figures can readily be broken down for individual carriers. The comparative results are quite illuminating. A discussion of individual cases would be fruitless and boring because of the welter of figures involved. If interested, you will get much more out of the figures in the privacy of your own office.

REDUCTION IN FUNDED DEBT

The reduction in funded debt has been brought about by reorganizations and by purchase of outstanding obligations by individual roads. The reduction in fixed charges may be attributed to both these factors as well as to refunding of outstanding obligations by a large number of roads. Most of these reductions have occurred within the last ten years, coinciding with the war period of high earnings. The industry as a whole has been most conservative in its dividend disbursements; in many cases, I believe, unduly so. During

the past ten years less than half of the \$5,976 million of net was passed along in the form of dividends. In addition to undistributed net income, the roads had a huge carry-through of cash from depreciation and amortization charges.

PROGRESS OF DIESEL OPERATION

The most important development in the railroad industry in the past ten years has been the development and rapid progress of Diesel operation. This is not strictly a financial development in itself but has had a definite effect on finances. The original cost is high—roughly \$100–110 per horsepower. However, by replacing 2-3-4 steam locomotives, we find that savings in the cost of operation enable the Diesels to pay for themselves in three to four years. In some cases, the time is much shorter, especially if substitution of Diesel power enables a road to avoid costly road improvements. The savings from Diesel operations have been probably the most important factor in the industry's ability to offset the increased costs of wages and materials. The purchase of the Diesels has, in large measure, been responsible for the increase in equipment debt and the resultant increase in annual maturity runoff.

In the first ten months of 1949, the railroads installed 1,557 Diesel locomotives, compared with 1,082 in the corresponding months of 1948. On November 1, 1949, 812 Diesels were on order. Considering the decline in railroad earnings in 1949, this continued investment in power, along with other additions and betterments, is noteworthy. The record over a period of years has shown a close correlation between earnings and improvements. In 1949 gross additions and betterments were estimated at \$1.3 billion, a shade above those of 1948 and almost 50% above those of 1947. Net income in 1949 was about \$260 million under that in 1948 and about \$40 million under that in 1947. This divergence in the relationship between income and property improvement accounts in large measure for the decline in working capital 1948-49 of about \$400 million. (*Applause.*)

* * *

Chairman Bretey: Thank you very much, Fred. I am sure that any of us admire your versatility in playing with figures.

Our second speaker, ladies and gentlemen, has made his mark in journalism. Not only is Jim Lyne a brilliant writer in his own right, with unusual executive ability, but also he has found time—heaven knows how he has done it—to write a full-fledged book toward the completion of a graduate degree and now has the august title of Dr. Lyne. I might say parenthetically that one of my treasured works is his doctorate thesis, properly embellished by his signature. He is a keen student of rail economics, and we are fortunate indeed in having him with us today to discuss "What Is Competition Doing to Railroad Traffic and Rates?"

* * *

Mr. James G. Lyne: Thank you very much, Pierre, for the ad about my book and my night school degree.

I was telling Walter and Fred up here, before we moved behind the "altar," that I could probably tell all I know about the subject assigned to me in perhaps twice the length

of time that has been allotted to me, but, if I brought all the documents and statistical information that is available, it would probably take me at least a week to drag it all out. It is a very large subject.

There are a couple of pieces of recent news that I think you all may be interested in, which have just come up within the past week. One is: I believe I am safe in saying that there is going to be a large industry—and maybe more than one—before long that will issue instructions to its traffic department to give the railroads an opportunity in every case where competitive traffic is involved to meet the truck rates before they direct the traffic to the trucks. In other words, they will give the railroads the first chance at their traffic. I think that is a very important development, because, if the traffic departments are held to no objective more farsighted than immediate savings in freight charges and are discouraged from taking a long-run view on the question of where the traffic ought to go, a good deal more of it may go to the trucks than if traffic departments adopt the view that this large industry is going to take.

Another item of news that perhaps some of you may have seen in last week's *Times*—I think it was Thursday—was that a firm of consulting engineers, Griffenhagen & Associates, is employed by the Citizens' Public Expenditure Survey, in New York, to survey highway financing in New York State. They have spent some months at this. A complete report is not yet available, but, among the high lights of their findings, these engineers have concluded that the private automobiles are paying, on a ton-mile basis, approximately four times as much for their use of the highways in New York State as the heavier trucks. These engineers recommended increasing the fee charged a heavy truck, depending on the level at which expenditure for highways is going to be carried on in New York, to anywhere from \$2,257 for a high rate of expenditure on highways down to \$829 if present expenditures are continued. These two figures compare with the present license fee for a truck of this size of only \$172.

The Griffenhagen people also reported that, of total taxation on a big, combination truck, New York State now ranks 45th among the states, New Jersey 48th, Massachusetts 47th, Rhode Island 43rd, Connecticut 39th, Pennsylvania 36th, and Maryland 34th. This means that along the Eastern Seaboard, around this metropolitan area, we have a long way to go in getting these heavy truck fees up to anywhere near a level comparable to what the private automobiles are paying.

I am always very suspicious of information that I get on railroad traffic when some fellow comes running in and says, "Well, we have lost all of this traffic to the trucks," or, "We are still holding that traffic." It seems to me there is a tendency in a good many places to do a lot of generalizing from inadequate particulars. It is an advantage to form hasty general conclusions from a few scattered facts, of course, because you can get your statistics quickly that way, but I am afraid that in too many cases such information is not dependable.

The information I present here is, therefore, taken largely from the ICC figures, and you probably know them as well as or better than I do. The ICC, in its annual report for 1949, presented the usual table, showing how the Nation's

freight traffic was divided among the different methods of transportation. This tabulation indicated that the motor carriers of property in 1948 moved 8.69% of the total freight traffic and received \$2,800 million in revenue, which was as much as the freight revenue of the class I railroads in the same year.

64% OF NATION'S TON-MILES

The railroads in 1948, according to the ICC compilation, handled 64% of the Nation's ton-miles. In its monthly comment for February 1950, the Bureau of Transportation Economics and Statistics of the ICC presented figures that indicated that the total ton-mileage of freight of classes I, II, and III for hire truck carriers increased 107% from 1940 to 1948. During the period the increase in railroad ton-miles was only 71%. The same bureau also reported that the class I motor carriers of property enjoyed an increase of 11% in operating revenue in the first nine months of '49, whereas during the same period the class I railroads suffered a decline of 9% in their freight revenues.

FREIGHT RATES INCREASED 57%

Railroad freight rates have been increased in the aggregate over 57% from the end of World War II to date, but the increase in revenue per ton-mile has been less than 50%, indicating, of course, that it is the higher rated traffic that has left the rails for the highways.

The ICC figures on truck traffic in 1948 indicate that the average rate paid on this traffic was in excess of 3 cents per ton-mile. It is doubtless considerably higher today.

To use round figures, therefore, it seems safe to assume that intercity truck transportation is moving about 100 billion ton-miles of freight traffic, for which it receives in excess of 3 cents a ton-mile, and that gross revenue is certainly in excess of \$3 billion. If only one third of this traffic and revenue is assumed to be within the economic range of rail haulage, which appears to be a most conservative estimate, then there is at least \$1 billion of freight business here which with fairer competitive conditions might be recaptured by the railroads. This is enough business to mean a lot to the railroads if all or any considerable part of it can be returned to rail movement.

Some railroad men are of the opinion that, if the regulatory authorities would permit them to do so, they could recapture a great part of this traffic by making rates on it that would be within the cost of rail service, even with the railroads' present handicaps. Other railroad men are afraid if they made such rates, they might lose more in revenue on the traffic remaining on the rails than they would regain on the recaptured traffic. I have, however, within the past two weeks discussed this matter with a studious-minded railroad president, who advises me that practically all the rates on the railroads above truck-handling cost, which he figures at around 4 cents a ton-mile are today "paper rates," with very little traffic moving at those rates. In his opinion, if the railroads would reduce all rates above 4 cents to around 4 cents a ton-mile, they would increase their traffic and also their average ton-mile earnings, and they would not suffer a decrease in traffic now moving. In his opinion very little traffic is left on the rails today that is paying in

excess of 4 cents per ton-mile (except traffic that involves excessive handling costs or liability to loss and damage).

DISAGREEMENTS ON FACT

One thing that is very disturbing to me in this whole situation is that there are so many disagreements on questions of fact. Some railroads quite likely have satisfactory information on these questions, but the information is not generally available, and, consequently, there is a good deal of argument on questions of fact.

It would undoubtedly be a far sounder procedure economically to increase the fees for highway use by commercial users to a compensatory level, get the legal weight of trucks down to what highway officials say the maximum should be, and then endeavor to enforce the laws against overloading, than it would be to try to get all this traffic on the rails by a rate war between the railroads and the trucks.

A CONDITION NOT A THEORY

On the other hand, as I believe Grover Cleveland said, it is a condition we face, and not a theory. The whole freight traffic situation as it now stands is highly unstable. It is hard for railroad people to sit down and do any advanced calculating in regard to new facilities—fixed plant facilities, particularly—when they cannot foretell with any assurance that legal weights on the highways may not be doubled or fees for highway use cut in half. The whole question of payment for the use of the highways is left to political calculation, and, as long as that is the case, it is very difficult for a railroad to calculate with any certainty whether a given investment in a railroad facility is going to pay or not.

It seems to me likely that a combination of the two methods—that is, supporting other highway users in their efforts to limit the weight of trucks and to exact larger payments for their use of the roads, plus using rate adjustments wherever they will earn a margin over operating expenses and win back traffic to the rails—will be needed to meet the situation. In either case, however, a great deal of public education will be required to make it clear that all the railroads are endeavoring to do is to secure the traffic to which their inherent economy entitles them and that they are not in any sense seeking to place obstacles in the way of those truck operations that are intricately superior in economy to movement by rail.

I think we will have to face the fact that we had a nice, orderly system of rates in the United States at one time, that the Interstate Commerce Commission is continuing to insist on enforcing that orderly system of rate making on the railroads, but that the system of rate making has disappeared in all other branches of transportation. When railroad rates—nicely calculated by some idealistic regulatory formula—are out of line with the rates at which industries can transport their goods for themselves, the industries will not use the common carrier. It is quite unrealistic to try to keep a beautifully symmetrical rate structure like that unless we are going to enact a commodity clause against shippers, which, I must say, I see no prospect of at the present time.

On the questions of abuse of the highways by overloaded trucks and inadequate fees charged these vehicles for high-

way use, the interest of the railroads coincides with that of all other highway users. Of the 8 million trucks on our Nation's highways only a small fraction—about 400,000, or 5% of the total of all trucks and about 1% of the total of all automotive vehicles—are seriously competitive with the railroads for freight traffic. The Nation's 7½ million farm trucks and delivery trucks do not compete with the railroads at all and have, indeed, relieved them of a lot of extremely short-haul traffic which it was never economical for the railroads to handle anyhow. Even if it could be shown, which I do not contend, that fees charged for highway use by light trucks were inadequate, that deficiency, if there were a deficiency, would not and could not inflict any injury on the railroads, because these light trucks do not compete with the railroads.

COMPETITION OF TRUCKS SERIOUS

But the competition of the 400,000 oversized trucks—the great big units, and tractor-and-trailer combinations—is very serious indeed to the railroads. Such trucks as these are going out after the most profitable part of the railroads' long-haul freight traffic—and they are able to divert this traffic, not for sound economic reasons, but primarily because they pay less in proportion to their use of the roads than the lighter vehicles and because many of their operators persistently violate the law by overloading.

If this insignificant percentage of total automotive vehicles—in fact, only 1% of total vehicles, and 5% of total trucks—were required to pay compensatory charges for highway use, were limited in size and weight to the loads the highways were built to sustain, with these limitations being strictly enforced and violations adequately penalized, then all cause for controversy between the railroads and highway users would be eliminated. The operators of this 1% of all automotive vehicles appear, however, to be politically powerful out of all proportion to their numbers. They seem to do all the talking for the entire truck business of which they comprise only 5%. When anything is said about limiting the weights and sizes of trucks to reasonable proportions, or requiring the operators of such mammoths to pay fees in proportion to their ton-mile use of the highways, it is the operators of these big tractor-and-trailer combinations who raise an outcry to the effect that the owner of every little farm or delivery truck in the country is being attacked.

The fact is that the interests of the operators of these big, long-haul vehicles are just as much opposed to those of other highway users as they are to the interests of the highways, and such organizations as the American Automobile Association are recognizing this fact and are beginning to get vocal about it.

Thomas H. MacDonald, U. S. Commissioner of Public Roads, in an address to a road builders' convention in Washington a year ago, told of an instance in Missouri where highway traffic was detoured for six months onto a 30-mile stretch of concrete highway, put down 15 years previously and in good condition. Traffic using this detour included 1,200 to 1,500 trucks per day—the majority with axle loads over 14,000 pounds and a very few with axle loads over the legal limit of 18,000 pounds. At the end of six months, with this kind of traffic, the pavement was

heavily damaged; \$5,000 a mile was spent to repair it; and even these repairs did not put it back in its original good condition. Said Commissioner MacDonald:

Once the payment is broken and distorted by even one excessive overload, all heavy truck traffic, including wheel loads within the legal limit, is a destructive force . . . In some quarters it has been suggested that there be a gradual raising of axle load limits over a period of years. No policy would be more wasteful of public funds.

Flagrant and repeated violation of weight limitations, which are already too liberal anyhow to prevent serious damage to our highways, is occurring daily all over the country, with fines so light in proportion to the profits gained from overloading that they constitute no effective deterrent. Moreover, in most states the enforcement machinery is so inadequate to the task that no one supposes that more than a small fraction of actual violators are apprehended. And you and I—private motorists and income taxpayers, together with the operators of light commercial vehicles—are footing the bill. I think there is hardly any doubt that other highway users are waking up to this situation and that the sequel will be of benefit to the railroads in holding onto traffic to which they have a sound economic claim.

HANDICAPS SHOULD BE REDUCED

The logical conclusion from the foregoing observations is that the handicaps that confront the railroads in the form of exorbitant favors given by the taxpayers to long-haul truck transportation should be reduced, in course of time. I certainly do not believe, however, that any development in this direction alone is going to settle all the difficulties that confront the railroads in meeting truck competition. Not all these difficulties, by any means, spring from the assistance that trucking enjoys from the public treasury. Equally important is the freedom of most truck transportation from anything approaching the degree of regulation that encumbers the railroads. Since it will always be impossible to regulate truck transportation as long as private trucking is legal, it follows logically that the railroads can meet truck competition equitably only if they are very greatly relieved from the excessive regulation from which they are now suffering.

Railroad people themselves, with one or two exceptions, have not been very definite as to their needs in the direction of decreased regulation. Perhaps by asking them the right questions you analysts might help them reach a more definite conclusion in this matter. Just as a suggestion, I believe it might be reasonable to put the burden of proof on any objector to a rate proposed by a railroad or group of railroads that in a term of five consecutive years had failed in any one year to earn 6% on its property investment. This proposal may sound radical, but all it amounts to is the conclusion that the preservation of the railroad industry is more important in the public interest than the enforcement of finespun rate relationships. I contend that, only after a financially healthy industry is assured, does the question of the policing of prices of that industry become a legitimate subject for regulatory attention. A corpse needs no regulation.

The analysts, it seems to me, have done a wonderful job

in improving their communications with the railroad industry in recent years. I don't think anything could be more helpful to the industry than continued efforts in that direction. I certainly am glad to offer the hospitality of that part of the railroad press I represent to any and all of you who believe you have something to say that the railroad industry ought to know about and that they don't know about or don't know enough about.

I look on an analyst, when he is doing work that has to do with the current situation, a good deal like a sentinel for private enterprise. He is there on guard, and, if he sees something going wrong, he has a duty, not just to his own employer, but also to the public interest in preserving our private enterprise system, to sound a warning. If he sees things wrong and does nothing about them, and doesn't strive to communicate them to people who can act, he is falling down in his duty. I know that a great many ladies and gentlemen in this room agree with me in this point of view, but I don't think it can be too strongly emphasized how valuable a contribution the analysts could make to the railroad industry if their efforts in this direction were increased.

I recall a characterization that Westbrook Pegler gave of, I think, John T. Flynn. He said in effect that John T. Flynn is the kind of economist who sees something he doesn't like and comes running with a cry to "Call the cops." I think a lot of things uncovered by railroad statisticians about the transportation situation deserve a cry of "Call the cops"—perhaps even more than some of the things that Mr. Flynn has uncovered.

On the general subject of legislation, an article in the current issue of *Railway Progress*, which, as you know, is the organ of the Federation for Railway Progress, denounces the railroads for being inept lobbyists. It is rather entertaining reading. I don't think the accusation is necessarily true—at least not for the whole country—but there are some interesting and, I think, informative observations in the article. Also, I think the Brookings Institution report on national transportation policy by Messrs. Deering and Owen is a valuable contribution to this general subject.

NEED IMPROVED COMMUNICATION

We need improved communication in and around the railroad business—to get usable information in the hands of those who can and will put it to work. In this industry we have more raw statistical material and less of the finished and usable product than a good many other industries which have nothing like the rich statistical data we have.

I thank you, Pierre, for the opportunity to be here, and I do hope that all of you will call on me freely at any time to be of any assistance I can in getting the valuable work of this group before the railroad industry. (*Applause*)

* * *

Chairman Bretey: Thank you very much, Jim. Our third speaker is somewhat of a paradox, if I may say that, a thoroughly cultured, even-tempered individual who, at first glance, seems to be out of place with many of his rougher confreres in the railroad industry. Perry Shoemaker, through his own ability, has worked himself forward to the highest

echelon in railway management, at the same time gaining the reputation of being one of the best-informed men on the broad question of economies derived from capital expenditures. It is because I feel strongly that railroads can survive as private carriers only through large-scale modernization that I cajoled Perry into being with us today. It gives me great pleasure to introduce to you the vice-president of the Delaware, Lackawanna & Western Railroad Company, Mr. Perry M. Shoemaker! (*Applause*)

* * *

Mr. Perry M. Shoemaker: It is a great privilege to take advantage of Mr. Bretey's invitation and briefly tell you something of the more encouraging aspects of using the newer available technical equipment for railroad operations. You will appreciate, I am sure, that my remarks are colored more by my current experience as chief operating officer of the Lackawanna than by detailed knowledge of problems and practices on railroads generally in other sections of the United States. Likewise, I ask your indulgence in connection with such few Lackawanna statistics as seem particularly pertinent to this form.

LACKAWANNA A SHORTER TRUNK LINE

For the benefit of those not familiar with the characteristics of the Lackawanna, it may be helpful to point out that it is one of the shorter eastern trunk lines, with 952 miles of line and just under 2,500 miles of track; that its main line comprises the shortest mileage route—395 miles—between New York and Buffalo; that in 1949, with a gross revenue from operations of \$80,476,507, its operating ratio was 80.75 and its net income a few dollars under \$2¼ million; and that its once dominating revenue from coal amounted to but 18% of this (of which three fourths was anthracite), with passenger and head end income amounting to just under 16% of the indicated gross.

It is appropriate to point out that the Lackawanna's need for taking prompt advantage of newer technologies is implemented by those characteristics including:

1. A heavy suburban passenger service, normally amounting to about 275 trains per day, in the New Jersey area, with the usual high cost features of rush hour commutation requirements, these having a double-barreled cost because of a ferry service on the river and train service on land. Our yearly out-of-pocket loss on this commutation service, on the basis of a 1947 cost study brought up to May 1, 1949, costs, is \$4,104,514, including a 6% return, and with no return at all would be \$1,985,881. Wage increases made this substantially worse for the last half of last year.

2. A New York Harbor problem, with its attendant costs for floating and lighterage of freight on its easterly end (in connection with which we had a deficit of \$1,962,085 in 1949 as measured by operating and general expenses in relation to lighterage revenue).

3. Greater rise and fall per mile of main line than any eastern road and most western roads. Between New York and Buffalo our average of 10.09 feet compares with 2.6 feet for the New York Central, 6.17 feet for the Erie and 6.68 feet for the Lehigh Valley.

Not peculiar to the Lackawanna, but common to all roads, has been the incentive of an approximate increase

of 100% in material costs in ten years, wage increases as shown in the accompanying table, and pending disputes of:

1. Conductors and trainmen, for 40 hours yard work at 48 hours pay and penalty increases in compensation in various ways to road men.
2. Firemen, for extra fireman on all Diesel road locomotives and 40-hour week at 48-hour pay in yards.
3. Engineers, for substantial pay increases and a 40-hour yard week.
4. Switchmen, for a 40-hour week and pyramiding of other demands which if granted would mean a wage increase of approximately 62%.

TABLE 1. WAGE INCREASES

Increase per Hour	Date
<i>To Operating Brotherhoods</i>	
7½%	Sep. 1, 1941
9½c	Dec. 1, 1941
4 c	Apr. 1, 1943
5 c (plus 1 week vacation annually)	Dec. 27, 1943
16 c	Jan. 1, 1946
2½c	May 22, 1946
15½c	Nov. 1, 1947
10 c	Oct. 16, 1948
<i>To Nonoperating Brotherhoods</i>	
9 c (plus 1 week vacation yearly, except 2 weeks to clerks, agents, and telegraphers)	Sep. 1, 1941
10 c	Dec. 1, 1941
1 c to 5c (by classes of employe)	Feb. 1, 1943
4 c to 10c (by classes of employe)	Dec. 27, 1943
16 c (to all classes)	Jan. 1, 1946
2½c (to all classes)	May 22, 1946
15½c (to all classes)	Sep. 1, 1947
7 c (to all classes)	Oct. 1, 1948
20% (to all classes, account 5-day week)	Sep. 1, 1949

Each and all of these wage increases resulted from decisions by Government Boards.

The last items, in the Lackawanna's case, are in the face of a gross payroll last year of \$43,073,000, against just under 80½ millions gross income from operation. Incidentally, the take-home pay of our employes after tax, retirement, and insurance deductions averaged about 84% of their total earnings. To an increasing extent, employes are being encouraged to believe that all deductions should somehow, somehow, be taken care of by the employer without disturbing take-home pay.

What are the technological improvements available—at a price, usually—to the operating department?

The Diesel locomotive usually occurs to most people as our number one opportunity, and to a degree this is so. The Lackawanna purchased its first yard Diesel in June 1926 and its first road freight Diesel in May 1945. Today it has 55 Diesel switchers and 31 Diesel road locomotives, the latter comprising 60 freight units and 15 passenger units.

In the railroad freight rate case last year—*Ex Parte 168*—I testified that in 1948, if the Lackawanna had had no

Diesel locomotives whatsoever and if all its yard and road operations had been handled by steam power operated and maintained at the same efficiency achieved with the steam power actually used, its operating expenses would have been \$3,800,000 greater than they actually were.

If we analyze road operations alone, in 1949 the Lackawanna handled 64.8% of its total gross ton-miles by Diesel power, the percentage being affected up and down by

1. 15 new freight units being received in July.
2. three freight units being out of service on account wreck damage, May through September.
3. its normal business curve for summer and fall being disarranged by coal and steel strikes and work curtailments.

Our cost for operation and maintenance of Diesel road freight and helper locomotives for the year was \$2,542,482, or 42.4 cents per thousand gross ton-miles.

Where we used over 1,900,000 Diesel locomotive-miles to handle 64.8% of our gross ton-miles, we used 2,234,870 steam locomotive-miles to handle the remaining 35.2% of our gross ton-miles at an average of \$1.37 per thousand gross ton-miles. If all gross ton-miles had been handled by steam power at the operating and maintenance efficiency actually achieved by that steam power in use, the 64.8% of our traffic handled by Diesels at a cost of \$2,542,482 would have cost us \$8,205,695.

If this basis were a fair comparison, our road freight Diesels would have saved us \$5,663,212 last year on a total investment in that equipment of approximately \$9 million. I hasten to tell you that I do not consider this a fair conclusion. Diesel costs were favorably affected by new units of power and unfavorably affected by increasing maintenance costs of older units, and particularly by poorer average utilization during the months of traffic irregularity. Steam costs were favorably affected by our heavy repair locomotive shops being substantially closed in October, November, and December; and unfavorably affected by the choice runs, the best dispatchments and, in general, the heavier tonnage going to Diesel power as first preference when available. In addition, our steam costs reflect the high locomotive expense of many local freight, road switching, and mine run assignments working eight hours per day but five or six days per week. We roughly estimate that an absolutely fair basis of comparison would indicate savings last year approaching \$2 million.

Conversely, it is erroneous to assume that all of our gross ton-miles could have been handled at a cost of 42.4 cents if we had been completely Dieselized in road service last year. It would not take equivalent Diesels to replace our 40 road freight steam locomotives now in service with present depressed business, but the efficiency in utilization of a sufficient ownership to handle all service by Diesels would be so low as to cause serious misgivings.

The road locomotive situation from my point of view is this:

1. The Lackawanna has purchased enough road freight Diesels to take the cream in road freight savings on the main line.
2. To achieve an attractive return on further road Dieselization, we must go far enough by territories to get every contingent economy (shops, buildings, roundhouse trackage, coaling stations, water stations, repair forces, re-

arrangement of service) and then be sure we are saving real dollars, not imaginary ones, having in mind the out-of-pocket cost of continuing well-depreciated facilities and steam locomotives in marginal cases.

3. All-purpose locomotives—units satisfactory for both yard and road operation—offer more promise from here out than straight road freight locomotives or straight switchers.

In the switcher field, our 1949 ownership of 66 steam switchers cost the Lackawanna \$2.05 per locomotive-mile for operation and maintenance, as compared with 28 100-horsepower Diesel switchers at \$0.824 and 22 1000-horsepower Diesel switchers at \$0.771. The average age of the 600-horsepower locomotives is fourteen years, compared with 38 months for the 1000's, this being the primary reason for the disparity in costs between the two Diesel classes.

However, here again, in 1949 the Diesels took the most favorable yard assignments. We have no more three-trick assignments on which additional yard Diesels can be placed, and very few two-trick assignments. A five-day yard week is in the offing. Two-trick assignments on a five-day basis (10 tricks in use per week out of a maximum of 21) make real economies of attractive amount difficult to attain.

In summary, our experience indicates that Diesel savings taper in road service after about two thirds of potential gross ton-miles are Diesel-hauled and in yard service after approximately 70% Dieselization is accomplished. This may not be a sound formula for other properties, as there is too much variation in operating characteristics between most railroads to draw such a conclusion.

A second major technological opportunity lies in mechanized freight and materials handling.

Mechanization of freight handling at railroad freight stations and transfers has been proceeding at an accelerated rate. The experience of the Armed Forces with unitized packaging and loading methods, particularly fork lift and pallet operations during the last war, coupled with the railroads' pressing need for finding additional economies to offset the increased labor pay rates, has brought us to the present state of development.

As a generalization it can be said that at large operations, particularly those dealing with carload freight, such as we have in New York Harbor, the transition from the hand truck to the fork lift truck is nearly complete. At LCL operations, however, we have a much more complicated problem, and, although mechanization has been adopted at a great many large LCL stations and transfers, there remains a substantially large area in the medium-size and smaller freight stations for which the answer is still to be found.

The following types of mechanized equipment are commonly in use:

1. Fork lift trucks and pallets.
2. Tractors and trailers.
3. Low lift platform trucks and live skids.
4. Mechanical load carriers.
5. Miscellaneous equipment such as mobile cranes, containers of various types (used in combination with fork lift equipment, crane equipment, or low lift platform trucks), and conveyors, both stationary and portable.

In carload freight handling operations the fork lift and

pallet are presently doing the bulk of the work, whereas on LCL, tractor-trailers and/or mechanical load carriers with fork lift equipment as an auxiliary are usual.

The principle that economy in freight handling is obtained as the size of the unit handled is increased is sound, provided that due consideration is given to factors such as

1. Type of facility.
2. Size of facility in relation to tonnage handled.
3. The effect of mechanization on that part of the freight house organization which is not actually involved in the movement of freight. At the present stage of development it is still necessary to "check" all LCL freight on receipt (that is, determine that the quantity billed has been received and that the packages are in good condition and properly marked), and, after it has been conveyed by the mechanical unit from the point at which it has been received to the car in which it will be loaded, to again handle the package to insure proper stowage. The size, shape, and character of LCL freight is so varied as to make this necessary. Presently only a very small fraction of LCL freight is coming to us in palletized or other types of unit loads.

A substantial portion of freight house labor is involved in this procedure, and careful study must be made to determine how these functions are affected by the size of the mechanical unit and its flexibility.

It is difficult even as a generalization to draw comparisons between type of equipment and another. There is no evidence that in all circumstances one type is superior. Much depends on the facility, the type of freight handled, and the circumstances at the particular freight station.

The railroad industry clearly recognizes that one of the answers to its high freight station operating costs lies in additional mechanization. Involved, however, at many locations is the need for new freight station facilities, or major changes in those presently used. This entails large capital expenditures, and therefore there is need for a reasonable amount of caution. We must clearly demonstrate, in each case, that the potential saving from the use of mechanized equipment is large enough to warrant the outlay of very large sums of money for major facility changes and that, as far as can be foreseen, no other conditions may act to offset the natural advantages of mechanization.

The effect of mechanization can be shown in an interesting way at the Lackawanna's Hoboken pier operations, where just under 1½ million tons of export, domestic, and import freight were handled last year. It was the first year of complete mechanization. In spite of the 20% increase in hourly rates due to the five-day week effective September 1, we accomplished the following at this location:

	1948	1949
Tons handled per man-hour	2.44	2.83
Cost of handling, per ton	\$0.495	\$0.455

I call your attention to this operation being carload exclusively, carload freight being handled at this location.

A third outstanding technological opportunity relates to mechanization of maintenance of way and related operations.

The Lackawanna is electrified between Hoboken and Dover on its Morristown line and also on two branches leading therefrom. We have five substations, formerly

TABLE 2

Spike pullers	— with which	3 men do	the work formerly done by	20.
Bolt tighteners	— with which	1 man does	the work formerly done by	6.
Adzing machines	— with which	6 men do	the work formerly done by	20.
Tamping machines	— with which	30 men do	the work formerly done by	120.
Power jacks	— with which	1 man does	the work formerly done by	4.
Spike drivers	— with which	1 man does	the work formerly done by	4.
Rail cranes	— with which	3 men do	the work formerly done by	18.

manually operated around the clock. They now are normally unattended through both automatic and remote controls, with a saving of ten employees.

In connection with the general maintenance of building wiring, motors, and controls, the widespread use of low voltage air circuit breakers has been a major factor in our electrical maintenance force being reduced approximately 75% in a comparatively few years.

In our present communications system by telephone and line wire, pole line maintenance is a major consumer of man-hours. There are encouraging indications that micro-wave may bring us more dependable performance with attractive savings.

In the roadway itself, a relatively greater savings probably has been and still can be realized, through the application of modern technology, or mechanization, to the work done under the jurisdiction of the maintenance of way department, on a railroad than can be realized in any other branch of railroad work.

In general, 12 to 15 cents out of each dollar a railroad earns is expended to maintain its buildings, structures, track and right of way. This work is done by relatively high-priced labor; a common laborer now receives \$1.26 per hour. The working agreements with the various brotherhoods provide that headquarters must be established for these men and they must be paid for traveling between headquarters and point of work. Maintenance supervision therefore has been confronted with two basic problems:

1. Providing adequate transportation to obtain more "on the job" hours.
2. Providing machinery on the job that would eliminate high-priced labor.

The first approach to the transportation problem was to provide self-propelled track cars. This was a great improvement over hand-propelled cars or merely walking. However, railroad tracks are provided primarily for train movements, and much time was lost by maintenance of way gangs in waiting until all trains had moved before they were allowed to do so with their on-track transportation. In order to give the least interruption to train service and to cut down the waiting time involved in the use of track cars, maintenance of way departments have employed the use of highway trucks to a great extent and at a great savings through elimination of this unproductive waiting time. We have 40 such trucks on the Lackawanna.

Almost every phase of maintenance of way work has been mechanized to some extent: power-driven portable saws, drills, wrenches, and so on have been furnished to the bridge gangs; paint sprayers, automatic scaffolding, power-driven cleaning and chipping tools have been furnished to the paint gangs, and so forth. However, the largest applica-

tion of laborsaving machinery has been made in the track department, which as a subdepartment of maintenance of way accounts for about 70% of this department's expenditures. Until recently most of the work in the track department was done with hand tools. In recent years, however, machinery of every nature has been developed to reduce labor costs involved in track work. Some of these developments are shown in Table 2.

In addition, ballast cleaning machines have been developed to clean and reclaim stone ballast, weed and brush sprayers to kill weeds which interfere with drainage and brush which fouls wire lines, switch heaters and snow melting equipment to keep switches and tracks clear of snow and ice, and many other pieces of equipment for specialized service.

Despite this extensive development, there is still a high labor requirement in maintenance of way work, and additional equipment is under experimentation and development at all times to reduce this requirement.

As an interesting sidelight on our progress, the Lackawanna's bill for crossing protection was \$369,000 in 1940 and \$556,000 in 1949. During 1941 to 1949, inclusive, we made capital expenditures of \$419,000 to install automatic gates and flashers and eliminate crossing watchmen. In terms of present wages, that expenditure is saving \$10,000 annually; yet our protection bill is 50% higher than it was in 1940.

Presumably the basic question in the mind of any security analyst is whether the carriers have sufficient opportunities for further economy in operation to stay financially healthy in the face of subsidized competition, which is currently taking railroad traffic on a price basis, and in the face of higher railroad labor expense in the offing. In closing, I will not attempt to answer that question fully, but I believe the following statements are pertinent:

1. The railroad industry cannot stay healthy on marginal traffic and as a true common carrier, while its subsidized competitors who pose as common carriers serve only such communities as they want to serve and take such traffic as they elect to handle.
2. Further operating economies are in prospect along the lines discussed and in related fields.
3. Most prospective operating economies require basic capital expenditures for which either cash or credit are mandatory.
4. Traffic that does not pay its way—and mail is an outstanding example—is a menace to the long-term health of the industry.
5. Economical operation of itself is but one facet of a railroad problem including a history of overregulation, publicly perpetuated inequality between various means of

transportation, and a current need for such an understanding with labor as will stabilize wage costs.

Your courtesy in affording me this opportunity is again acknowledged with appreciation. (*Applause*)

* * *

Chairman Bretey: We could not conclude this railroad forum without having someone look into the crystal ball, so to speak, and come up with the "best bets" for 1950. In considering who among our analysts could handle this subject most ably, I decided on Walter Hahn, who now is with Smith, Barney & Company. Those of us who know him well are aware how frequently he comes up with amazingly correct forecasts, and I am certain after you have heard Walter today you will say I underestimated rather than overestimated his talents.

It gives me great pleasure to introduce to you as our fourth and final speaker Walter F. Hahn, who will discuss his candidates for the title of Miss American Railroad of 1950. (*Applause*)

* * *

Mr. Walter F. Hahn: Thank you, Mr. Chairman. Ladies and gentlemen: Mr. Uhrbrock's mention of figures reminded me that I have been holding sort of a beauty parade myself here in recent weeks. I have been looking over some beautiful gross ton-miles per train hour, curvacious net current assets, budding retained earnings, and what have you, trying to answer this question about Miss American Railroad of 1950.

I have looked over so many numbers, that I think I am getting a little bit dizzy, but I have had a good opportunity to review at some length the war and postwar developments that have made such tremendous changes in the field of transportation.

These developments have had diverse affects on our various railroads. Some of the formerly strongest railroads are today in a very much weakened position; some of the weakest and, in fact, bankrupt railroads of the 1930's are today among the strongest. Many different developments account for these changes.

The railroads that today are best situated to cope with the well-advertised railroad problems are those that have benefited most from major favorable developments of the late war years and postwar period and have not been substantially hurt by other developments of an unfavorable nature. The favorable developments I have in mind include:

1. Greater than average growth of traffic resulting chiefly from greater than average population and industrial growth of certain areas, specifically the Pacific Coast, the Southwest, and Florida.

2. Inflation of wages and other operating costs and freight rates, the net effect of which has been to increase the earnings of low operating cost railroads.

3. Large expenditures for additions and betterments, including Diesel-electric locomotives particularly, resulting in improved efficiency of operation.

4. Better over-all financial position produced by reduced debt and fixed charges and strengthened cash and working capital.

5. Managerial changes productive of new leaders in the transportation field.

To be included in the most favorably situated group to be mentioned later, a railroad stock should, in addition, not be too substantially affected by certain unfavorable developments of recent years. Among these are:

1. Increased loss entailed in passenger service.
2. Downward trend of coal consumption and production.
3. Increased expense of terminal operation, particularly that involved in termination of a freight movement.
4. Greater than average loss of traffic to trucks due to type of traffic or length of haul or rate structure.

Another important qualification—a good part, and if possible an increasing part of net income should belong to the stockholder—not the bondholder or the equipment manufacturer or the treasury.

Few railroads have benefited from all the foregoing favorable factors and not been harmed by any of the unfavorable factors mentioned. But those that have been doing well and that will do relatively well in the current year are benefiting from at least some of the favorable factors and not being hurt unduly by the unfavorable factors. The stocks of such may reasonably be considered aspirants for the title of Miss American Railroad of 1950—if a good part of the net belongs to the stockholders.

Time limitations prevent any detailed discussion of the various favorable and unfavorable factors just mentioned. A word or two about some of them will have to suffice. First, with respect to regional changes—during the period April 1, 1940, to July 1, 1948, population gains varied as follows: northeastern states up 9%, north central states up 9%, southern states up 7%, western states up 34%. New York gained only 7% and Pennsylvania 8%, but Florida gained 24%, Texas 13%, Arizona 33%, Utah 19%, Nevada 28%, Washington 43%, Oregon 49%, California 45%. Thus, we find that whereas 1949 revenues for the New York Central, Pennsylvania, and Louisville & Nashville were about twice those averaged during the years 1935–39, Santa Fe, Seaboard Air line, and Kansas City Southern had 1949 revenues about three times those averaged in the late 1930's. When one railroad gains twice as much revenues as another, there is bound to be a change in the relative positions of the two.

Many people, according to my observation, have the impression that most, if not all, of the railroads were, on balance, hurt by the postwar inflation of wages and other costs, freight rates, and passenger fares. You will appreciate that this is not true of the railroads any more than it is true of any other industry whose component companies vary widely for any number of reasons in their costs of operation or production. Actually, it is demonstrable that during recent years, each time there was a wage increase and an offsetting freight rate increase, some of the low operating cost railroads were better off than before, from the standpoint of net income. The high-cost operation roads, on the other hand, experienced a decrease in net income.

These inflation effects, plus the wide variation in revenue trends of individual railroad companies, together with other factors, including quite marked variations in managerial ability, go a long way to explain the recent wide differences in the earning power and credit positions of our railroads.

Environment plus management make a railroad. Some railroads, owing to natural physical advantages, or greater

average traffic growth or absence of passenger business, or similar factors, have for years been able to operate on a lower cost basis than other railroads not so blessed. But the real advantages, or the other factors just mentioned, or the absence thereof are not by any means the whole story. The earnings produced by some railroad companies under the best of conditions are generally considered tough operating conditions. In an increasing number of cases, the result of greater managerial ability on the part of management. The more able the railroads the more I am inclined to stress this matter of managerial ability. It follows that I increasingly dislike to predict where any particular railroad will be five or ten years from now, since managements have a way of changing—for the better and also for the worse. Most recent changes appear to have been in the right direction. Unfortunately, there have not been enough of them. Not long ago I was talking with one of the top officials of one of our large railroad equipment companies. This man

knows railroad management as no one else. I asked him to define good railroad management. He said, "Some railroad managements expect a lot from their employees and get it. Other managements expect little—and get it. Employees live up to what management expects of them."

Not to be overlooked in any discussion of the current positions of our railroads are the wide variations in the amount of debt and fixed charge reductions accomplished through reorganization or otherwise during the past decade. The differences are very wide. Also wide differences exist in their cash and working capital positions. Where inadequacies exist, they cannot all be condemned, because in some cases they resulted from large use of retained earnings to retire debt or pay for additions and betterments. In other cases, however, a poor position has resulted from a long-term liberal dividend policy. Thus retained earnings per share are often an important clue to future position, and the rails I like best have been outstanding in this respect.

TABLE 1
Debt & Fixed Charges Comparisons

					-----Ratio-----					
Fixed Interest Debt (1)	Fixed Charges	Operating Revenues	Main-tenance Charges	Net Current Assets (2)	Fixed Interest Debt to Operating Revenues	Fixed Charges to Operating Revenues	Main-tenance Charges to Operating Revenues	Net Current Assets	Operating Actual	Ratio-Needed to Cover Fixed Charges
----- (Millions) -----										
son, Topeka & Santa Fe										
\$260.2	\$11.2	\$267.2	\$90.6	\$70.1	97.4%	4.2%	12.3%	15.9%	66%	89%
258.3	11.0	157.3	60.2	59.6	165.4	6.9	18.3	18.3	80	87
171.8	6.6	526.7	171.0	140.5	32.6	1.3	3.8	4.7	73	94
s City Southern (3)										
\$ 67.7	\$ 2.4	\$ 18.9	\$ 5.4	\$ 5.1	358.2%	12.7%	44.4%	47.1%	67%	84%
64.5	2.9	13.9	3.5	1.7	464.0	20.8	82.8	170.0	63	69
70.8	2.5	62.1	12.4	10.3	114.0	4.1	20.2	24.4	55	84
ard Air Line										
\$234.2	\$11.1	\$ 58.2	\$17.5	\$D6.2	402.4%	19.1%	63.4%	-	73%	75%
194.4	9.3	38.3	13.6	D0.4	507.5	24.3	68.4	-	83	67
64.7	2.1	132.7	44.0	43.8	48.8	1.6	4.7	4.8	79	92
tic Coast Line										
\$157.3	\$ 6.9	\$ 72.4	\$24.1	\$23.9	217.3%	9.5%	28.6%	28.9%	74%	92%
149.6	6.5	43.6	13.1	9.7	343.1	14.9	49.5	66.9	77	82
101.7	4.0	136.3	50.0	20.9	74.6	2.9	8.0	19.1	87	94
go, Rock Island & Pacific										
\$282.4	\$12.0	\$147.7	\$47.5	\$ 3.6	191.2%	8.1%	25.3%	333.3%	73%	84%
317.4	14.6	78.1	28.0	D8.5	406.9	18.7	52.2	-	86	70
82.2	1.7	197.4	53.7	32.6	41.6	0.9	3.1	5.2	73	90
r & Rio Grande Western										
\$133.2	\$ 6.5	\$ 38.8	\$13.4	\$10.2	343.3%	16.7%	48.5%	63.7%	69%	83%
129.1	6.5	28.5	11.7	D4.7	453.0	22.8	55.5	-	80	66
57.1	2.1	68.5	19.4	15.8	83.3	3.1	10.8	13.3	71	89
Northern										
\$336.8	\$18.3	\$125.9	\$37.4	\$23.7	267.3%	14.5%	48.9%	77.2%	66%	88%
345.6	17.8	89.6	22.3	27.6	385.7	19.9	79.8	64.5	63	75
248.4	7.5	216.3	71.2	42.1	114.8	3.5	10.6	17.8	75	91
ois Central										
\$413.9	\$18.4	\$181.0	\$64.9	\$ 1.3	228.7%	10.1%	28.4%	1,415.4%	77%	85%
389.0	17.1	115.0	34.1	9.6	338.3	14.8	50.1	178.1	74	75
248.9	10.3	268.2	88.9	47.8	92.5	3.9	11.6	21.5	75	88

Where important, includes rentals capitalized at 5%.

Includes U. S. Treasury bonds held as investments and not reported in current assets.

1948 figures include Louisiana & Arkansas; preceding years do not.

So far, I have spoken mostly of the favorable factors needed to qualify a railroad as one of the most favorably situated in 1950. There are, however, as previously outlined, some features it is desirable not to have, or to have as little of as possible. Passenger business, particularly of the short-haul, branch variety, is one of these, as is commutation business, for the most part. Coal traffic is another—not that coal traffic is unprofitable, in fact the contrary is true; but because the trend of coal traffic is adverse. We obviously face a period of three or four months of very high coal production and heavy coal carloadings and revenues. Thereafter the volume will be much lower than in recent years owing to diversion to other fuels.

In any selection of stocks such as I am here trying to make, other matters than those just mentioned deserve consideration: length of haul; age of equipment; need, or absence thereof, for large future expenditures for additions and betterments; abnormally large or subnormally low maintenance expenditures—all these are important and have been weighed to the extent possible in the following selection. From a market point of view, price too is important, particularly when, as at present, the railroad share market has had no reaction of importance since its low point nine months ago.

My candidates for the title Miss American Railroad of 1950 include the stocks of railroads that for numerous reasons ought to do rather well this year, even though developments affecting the industry should not turn out so satisfactory as now indicated. There may, and probably will, be others that do better from the market standpoint—particularly some of the extremely low-priced shares that lack substantial merit but would, in all probability, show large percentage price gains if we should have an extremely strong stock market all embracing in its scope. This may of course happen, but I doubt that a list of stocks here to be presented should be selected on the basis of such a possibility only.

My candidates are Atchison, Topeka & Santa Fe; Kansas City Southern, and Seaboard Air Line.

SANTA FE

A brief word about each: in the past ten years, Santa earned about \$175 per share of common stock and paid its stockholders \$55 a share. About \$120 a share was retained. In this period, it reduced debt from \$332 million less than \$220 million and fixed charges from \$11 million to \$6.5 million. It greatly strengthened an already strong working capital position. Cash and Government bonds and working capital are now each well in excess of \$150 million, or about \$60 per share of common stock. Tremendous amounts have been spent on the property for improvements and additions to road and equipment. Last year, revenues were over three times what they were on the average during the years 1935–39, reflecting not only agricultural prosperity, but also the tremendous population and industrial growth of the western area served. Maintenance expenditures have been heavy; transportation ratio is low. Average haul is second only to the Union Pacific.

KANSAS CITY SOUTHERN

Kansas City Southern in the 1930's had as little as \$1 million revenues annually. This was before acquisition of the Louisiana & Arkansas. Last year, the two had revenues of \$58.5 million. Last year, fixed charges of the system were about \$2.5 million, or less than those of Kansas City Southern alone fifteen years ago. Practically all of the system's mileage is main line. Traffic is relatively heavy. Freight density of the Kansas City Southern alone is heavier than that of any other company west of the Mississippi. Passenger traffic is extremely light, operating efficiency is high. Diesel-electric power is among the highest in the country. In the past ten years, close to \$100 per share of common stock were retained in the two constituent companies. Most of this was used for debt reduction, and modernization; some of it to pay for Louisiana & Arkansas which is now owned in lock, stock, and barrel. Because net earnings are such a large part of operating revenues, and because common dividends are such a small part of net earnings, margin of safety for the common dividend is greater than that for railroad bonds.

TABLE 2
1949 Income Account
Per Share of Common Stock

	---Operating Revenues---			---Operating Expenses---			Net Operat. Revenue	"Load"	Pre Tax	Tax	Earned On Common	Charges
	Freight	Passen- ger	Total	Main- tenance	Trans- portation	Total			Balance For Common	Applicable To Common		
Atchison, Topeka & Santa Fe	\$161	\$20	\$199	\$70	\$66	\$150	\$49	\$20	\$29	\$11	\$18	\$1
Kansas City Southern	103	4	115	24	34	66	48	20	28	10	18	
Seaboard Air Line	116	18	146	50	55	116	28	15	13	4	9	
Atlantic Coast Line	117	21	149	52	63	127	23	10	13	4	9	
Chicago, Rock Island & Pacific	107	15	131	38	48	96	35	20	15	5	10	
Denver & Rio Grande Western	169	9	186	60	67	143	43	32	11	4	7	
Great Northern	60	4	69	24	24	52	16	7	9	3	6	
Illinois Central	150	18	187	63	69	144	42	24	18	7	11	

"Load" consists of taxes other than federal income, equipment and joint facility rents, miscellaneous deductions, fixed and contingent charges, preferred dividend and federal income tax applicable thereto less non-operating income.

SEABOARD AIR LINE

Seaboard Air Line Railroad bears little resemblance to its predecessor. Revenues are three times what they were in late 1930's. Its physical and financial condition is fully improved. Reorganization cut fixed charges from \$10 million to \$2 million annually and created an extremely strong working capital position not fully disclosed. Net current assets, there being \$25 million Government bonds above the line and not included in current assets. Sustained earnings have been tremendous but are not easily calculated for the bankruptcy period. In the past three years, \$25 per share of common stock was earned, of which the stockholder received \$2.50. Maintenance has been heavy, and any reduction would benefit per share earnings considerably, maintenance charges last year having been \$50 per share of common stock. An indication of the overall improvement was the recent decision of the management to refund the first mortgage 4% bonds. Those who worry about citrus fruit traffic should bear in mind that in 1948 less than 5% of total revenues was derived from the movement of citrus. Seaboard has been making large investment in equipment, particularly Diesel locomotives and other improvements, and further substantial expenditures are indicated. However, to an increasing degree, net income belongs to the common stockholder.

Honorable mention goes to Atlantic Coast Line; Chicago, Rock Island & Pacific; Denver & Rio Grande Western; Great Northern; and Illinois Central.

Atlantic Coast Line has benefited greatly from the industrialization of the Southeast and the great growth of Florida. Last year's revenues were $2\frac{3}{4}$ times the average for 1935—compared with $2\frac{1}{4}$ times for class I roads. During the last ten years, about \$123 a share was earned on the stock, of which less than \$29 per share was paid to stockholders. Close to \$94 a share was retained in the company—this despite an extraordinary program of maintenance which included relaying of almost all rail. Freight density is relatively light, passenger business relatively heavy, average haul not exceptional. As a result, efficiency indices have not been outstandingly good, although recently showing improvement. However, this disadvantage is offset by the growth just mentioned; also by the fact that nonoperating income tends to equal fixed charges and net debit on equipment and joint facility rents. Fixed charges have been reduced from a peak of about \$7 million to about \$4 million, all through debt reduction, and the 1952 debt problem is one that will be solved without any great difficulty. Because of ACL's ownership of one share of Louisville & Nashville, for each of its own shares, ACL's equity in all assets other than Louisville & Nashville stock is appraised at

about \$5 per share. Leverage of the stock is high; each 1% change in operating expenses amounts to \$1.50 per share of common.

Rock Island common is the beneficiary of one of the most drastic railroad reorganizations ever conceived. Cash of almost \$100 million when the new company took over a little more than a year ago has also been an important factor in the outstanding recovery of high credit regard. Financial strength of Rock Island was recently demonstrated by sale of \$55 million first mortgage bonds on a 2.90% interest basis. Large-scale improvements to the property, strong finances, and excellent management all suggest a future greatly different from the past. Continued earnings of \$10 per share could reasonably be expected to mean a larger dividend, as a large part of earnings cannot very well be directed to bondholders, equipment manufacturers, or the treasury.

Denver & Rio Grande Western is a connecting link with the Pacific Coast. It was thoroughly rehabilitated physically during the long bankruptcy period. It shows greater than average revenue growth, and its efficiency indices are good, despite the physical handicap of crossing the Continental Divide. Reorganization cut its fixed charges from \$6 to \$2 million. The company is in strong cash and working capital position. The stock has tremendous leverage, revenues last year having been \$186 per share, maintenance charges \$60 a share. Under favorable conditions, earnings of \$10 a share seem quite possible.

Great Northern reduced its fixed charges in the past fifteen years more than any other large railroad that remained solvent—from \$19 to \$7.5 million. Dividend policy has been conservative. In the last ten years net income was \$216 million, and dividend payments \$72 million. Retained earnings of \$144 million (\$47 per share) are in excess of the market value of the stock. Efficiency of operation is marked, and maintenance expenditures have been large. Nonoperating income has been in excess of fixed charges. Fears regarding an early, serious decline in iron ore revenues appear premature. Working capital is large, expenditures for additions and betterments have been substantial, and debt problems are entirely absent. Thus, the dividend of \$4 is accorded a high safety factor and is considered much safer than a close to 10% yield basis alone would suggest.

Illinois Central has for ten years been concentrating on reduction of debt and solution of its 1950–55 maturity problem. Retained earnings have been tremendous. In the ten years 1940–49, \$102.50 was earned on the common stock. None of this was paid to shareholders. This explains, in large measure, the reduction in fixed charges from \$17 million in 1937 to about \$10 million today. Cash and working capital positions are extremely strong, even stronger than indicated by the balance sheet. Management is of extremely high caliber, offsetting considerably the burden of passenger revenues of size. Dividends on the common stock were recently resumed after an 18-year period, and the company and its securities seem headed back to their former positions of prestige.

I want to thank you all for your courtesy and patience since we have run over our time limit. (*Applause.*)

TABLE 3. RATIO TO OPERATING REVENUES, 1949

	Maintenance of Way	Maintenance of Equipment	Transportation	Operating
Chicago, Topeka & Santa Fe	16.0%	19.3%	33.2%	75.2%
Kansas City Southern	9.5	11.7	30.0	57.8
Seaboard Air Line	16.0	18.6	37.9	80.5
Atlantic Coast Line	16.6	18.4	41.9	84.7
Chicago, Rock Island & Pacific	13.8	16.1	36.4	73.3
Denver & Rio Grande Western	14.0	18.4	36.2	76.9
Great Northern	18.8	16.6	35.4	76.3
Illinois Central	17.3	16.8	36.7	77.3

1849



1949

Brooklyn Union Reports on its **ONE HUNDREDTH YEAR** of service

says **HANDY HEAT**

We Brought Better Home Living



1949 was a record-breaking sales year for automatic gas appliances—and the new gas clothes dryer was introduced.

What Women Want—Gas Has Got



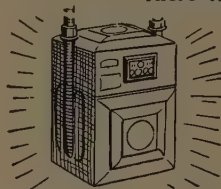
Through demonstrations and calls at customers' homes, our home economists helped more than 40,000 women.

Our Customers Got Dependable Service



Over 800,000 calls on customers by our expert service men assured efficient operation of all gas appliances.

There Were More of Them to Serve



The number of gas users rose to 837,000 in 1949—our largest number of customers—and Brooklyn Union employees increased from 4305 to 4453.

Our Taxes Could Keep 20,000 Children in School



Brooklyn Union, like everybody else, paid taxes. Total tax bill for the year was over \$6,000,000, an increase of more than \$1,400,000 over 1948.

We Increased Gas-making Capacity



In 1949, one of the world's largest all-welded-steel gas holders went to work and our new pipe line for carrying natural gas was begun.

SUMMARY STATEMENT OF INCOME

for the Years Ended December 31, 1949 and 1948

Particulars	1949	1948	Variation
Total Operating Revenues	\$39,701,551	\$38,153,385	+\$1,548,166
Total Operating Expenses	34,800,236	35,775,443	—975,207
Operating Income	\$ 4,901,315	\$ 2,377,942	+\$2,523,373
Other Income—Net	13,835	9,320	+4,515
Gross Income	\$ 4,915,150	\$ 2,387,262	+\$2,527,888
Total Interest and Other Deductions	1,692,044	1,483,750	+208,294
Net Income	\$ 3,223,106	\$ 903,512	+\$2,319,594
Per Share	\$ 4.32	\$ 1.21	+\$ 3.11

You may secure Brooklyn Union's Annual Report by stopping in at our Main Office or by writing the Secretary of the Company for one

THE BROOKLYN UNION GAS COMPANY

176 REMSEN STREET, BROOKLYN 2, N. Y. • TRIangle 5-7500

Outlook for Stock Market

THURSDAY, MARCH 2, 1950

WILLIAM R. WHITE, Hornblower & Weeks, presiding.

President Hooper: I want to apologize, particularly to Mr. Drew, for the fact that he will have to talk while you are eating.

Thank you very much for attending this convention today. If you come back tonight, I will make a real speech.

Chairman White: Friends, this is a red letter day. Our migration uptown marks a milestone in the short history of The National Federation. It signifies our advancement to the big league. In recognition of this growth, your committee has chosen a regular line-up for this stock market luncheon. I feel sure that, after you have partaken of the feast to be placed before you, you will agree that this function alone is worth the price of admission.

This is the first time, I believe, that we have had a coast-to-coast hookup in a market survey. We have representatives from the major markets from Boston to San Francisco. Though I have had a peek behind the scenes, I am not going to try to tell you what these speakers have prepared for you. All I can say is that I am sure you will have a clearer understanding of the market after they have told you what lies ahead.

Unfortunately, our time is limited, and, as you know, we are working on a very tight schedule with afternoon forums scheduled for 2:15, only an hour away, but within the prescribed limits we are going to try to tell you what the market is going to do.

First, I should like to make an announcement about questionnaires that have been placed on your table. Shelly Pierce of *The Journal of Commerce* has prepared them, as I did a year ago, and if you will kindly fill in the blanks, he will pick them up and tell you how wrong you were.

Now, because of the shortness of time, I have asked the speakers to limit their remarks to about ten to twelve minutes. Our first speaker, Mr. Garfield A. Drew, is a graduate of Harvard, the class of 1926. He was in the investment business in Boston for two years and came to New York in 1928, when he joined the investment affiliate of the National City Bank.

In 1933, he returned to Boston and joined the United Business Service, with which he remained until he set up his own firm, called Drew Investment Associates, a couple of years ago. This firm publishes what is called "The Drew Market Action Analysis." It is based on an analysis of odd transactions to determine human nature and public psychology. He has written a book called "New Methods of Profit in the Stock Market," which, he says, was the best seller in the financial world in 1941.

It gives me a great deal of pleasure to introduce to you Mr. Drew of Boston. (Applause.)

* * *

Mr. Garfield A. Drew: Ladies and gentlemen: If you don't know it before, Mr. White has certainly made it quite

plain that I am expected to put my neck out and tell you exactly about the future of the stock market.

But, before I do that, I have got to go into a little background information of just how I view the situation now and, for that matter, most of the time.

My introduction to the financial field consisted of standing on a platform, wearing a belt that was divided into little pockets. Those pockets held slippery little tabs reading from $\frac{1}{8}$ to $\frac{7}{8}$, and I remember that, if I leaned over a bit in the excitement of a 3-million-share day, the scrambled fractions on the floor were worse than the confusion on a late tape. In short, I was posting stock prices for the customers of a brokerage house.

From the first day, how those prices on the tape changed as they did intrigued me—and it still does. Who was doing all this buying and selling—and why? Naturally, I began to keep charts of the price movements and soon discovered that anyone who did so in that particular office, at least, was held in very low esteem.

PRICE ACTION STUDY NOW RESPECTABLE

I am glad to say, however, that the study of price action *per se* has since attained a reasonable degree of respectability. If we technicians have not actually crossed over from the wrong side of the tracks, we are at least within shouting distance of our neighbors across the way.

In part, the blame lies with ourselves. It is not made sufficiently clear that behind all the jargon about triangles and oscillators and gaps lies a perfectly simple and logical purpose. That purpose is to analyze the changes that are taking place in the activities of the thousands of individuals whose collective action makes all the price movements within the market.

We are, I believe, altogether too prone to think of "the Market" as some sort of mysterious—and perhaps antagonistic—entity in itself. But actually it is only the result of the buying and selling of many human beings like ourselves—motivated by varying purposes, varying emotions, and varying opinions. That is the basic fact of which we should never lose sight.

WHAT IS CURRENT PRICE

An industry expert may tell me that he considers a certain stock to be undervalued at its current price. Well, what does "current price" in that case mean? It means that some unknown person is willing to sell me his holding at what my expert friend considers a bargain level. I respect the expert's opinion, but someone obviously disagrees with him. Therefore, I also want to know what all the other buyers and sellers have been—and are—doing. The only thing that will afford any idea on that score is a record of the trading in that particular stock. This record of human activity may indicate little or much, but it is still a vital factor in arriving at a decision.

If we could break that information down still further

and know, for example, whether people in that particular business were buying considerably more stock than they were selling, the record of transactions would be even more valuable.

No such information is available on a current basis, at least. However, if we take the market as a whole, there are two breakdowns of the total trading by different groups of individuals that are highly significant. One is the detailed record of the purchases, sales, and short sales made by New York Stock Exchange members. The other is a similar tabulation of all odd lot transactions, which is the more important. In their entirety, we only have a ten-year record of these figures, although some of the data go back further, and there is an invaluable compilation of odd lot trading on a monthly basis, beginning in 1920, that was made by the Brookings Institution.

Obviously, odd lot transactions as a whole do not represent the activities of any one clearly defined group of people. On the other hand, I believe that, in a broad way, they are a fair sample of the public's buying and selling in the stock market. As such, they constitute a record of human behavior that is remarkably consistent in its responses. That is only natural, however, because human nature in the mass is always consistent. As the late Thomas Woodlock of the *Wall Street Journal* once remarked: "The principles of successful speculation are based on the supposition that people will continue in the future to make the same mistakes that they have made in the past."

CONSISTENT PATTERN OF MISTAKES

The significant fact is that we find a consistent pattern of these mistakes running through the trends of odd lot trading. This is not to say that, because odd lot sales may exceed purchases, the public is bearish and that, because the public is usually wrong, stock prices will therefore rise. The matter is nowhere near that simple. In fact, judged only by whether odd lot purchases or sales predominate, the public is invariably right near important low points in the market because odd lot buying is then always heavy. But—and here is the mistake at such junctures—it is never so heavy at the bottom as it was on the way down. The thinking is never pushed to its logical conclusion, and, when it backtracks a little, so to speak, we have an important clue that the bottom is finally at hand.

It is possible to see quite clearly from the records of odd lot trading just how public psychology works and where the mistakes are always made. The Brookings Institution data mentioned earlier show that the patterns of behavior were just as consistent back in the '20's as they have been during the past decade.

When a bull market first gets under way, it is greeted by increasing odd lot selling. The reason is that prices now look high in relation to what they have been. At this stage, the public will buy on reactions, but not while prices are advancing. After prices have been going up for a long time, however, skepticism diminishes, and we find at least less selling and probably some buying. There has now been enough time to become accustomed to the higher price levels, and the lows of a year or two before are forgotten. This again is a consistent mistake—to begin turning more

bullish at a time when it would be better to become more cautious.

When the bull market is finally over and the first severe break in prices occurs, we find a tremendous increase in odd lot buying. Just as prices at first looked high on the way up, they now look low in relation to the previous trend. This standard of comparison persists for a long time, but just as a long upward trend finally kindles confidence, so does a long downward trend ultimately shake it. Buying still exceeds selling, but not to the same extent as earlier, and this is what marks the final phase of a bear market.

Thus, the natural human tendency is to sell an advance and buy a decline, but to lose faith in this initial impulse at the wrong time. It may be said that a change of sentiment on the part of the public after any market trend has become well established is almost always just the opposite of what it should be.

I am aware that, when I say the "public," I am using a very loose term and one that is extremely difficult to define indeed. What it really includes, perhaps, are all those who obey their natural impulses in market dealings and who blindly accept the popular and seemingly logical ideas of the moment. The unquestioned prospect of a business boom, for example, made it appear logical on the surface to buy stocks in early 1946, but it was distinctly the wrong market procedure.

If you will accept my premise that odd lot trading is a fair sample of the public's activities, the fact emerges that the public is seldom, if ever, a dominant factor in shaping the price trend. To take a very recent example, odd lot trading tended more and more to the bearish side all during the last half of 1949, but stock prices were steadily rising. Obviously, then, some other segment among all those dealing in the stock market was exerting an opposite and more powerful influence than the desultory odd lot sellers who felt that prices were looking too high!

Viewed in this way, an apparently anomalous characteristic of price movements becomes much clearer. I refer to the propensity of stock prices to change in the direction that is generally least expected and seems the least logical. It is unnecessary to recite to this gathering the many instances of this sort well within our memory. To take the most recent one, however, think back to the end of summer. Two apparently bearish developments were in the offing: (1) a steel strike, and (2) devaluation of the British pound. There was no secret about either. Both probable events were widely advertised in newspapers and magazines with the added assumption—stated or implied—that they would be bad for business and the stock market. You could just see the response in odd lot trading. The ratios of selling to buying reached an extraordinarily high level around that time—and with the usual results. With such a trend is manifested on the basis of obvious developments. Without fanfare or any published reasoning on the part of some other buyers, however, the public's offerings were quietly absorbed and prices pushed on to new heights.

That was a particularly clear-cut example, and I would not have you think that the analysis of public sentiment through odd lot trading is either always easy or always a perfect answer. It is not—but it does involve some fundamental truths that are inherent in the nature of the game.

that have been remarkably consistent for many years. I am sure that at this point your main interest is in knowing how the pattern of public behavior as expressed in the odds of odd lot trading fits into the present picture. My position here may be stated very simply. On the basis of precedent, the current bull market will not end until the public has displayed more willingness to absorb stocks than has been the case to date.

Public psychology travels in its own cycles in relation to market movements. During the first half of 1949, we had the situation that has characterized the last phase of every major bear market since 1921—that is, public pessimism shown in odd lot trading by a decreasing willingness to buy stocks while the price level was declining. Conversely, we may expect the final phase of the current bull market to be accompanied by the opposite phenomenon, as again—has been the case at all major tops of the past thirty years. Sooner or later, there should be a tendency expressed in odd lot trading for the public to become less bullish than it has been while prices are still in an advancing trend.

Through the end of last year, there was only the growing skepticism normally shown when a major advance first gets under way. From June through December, odd lot selling increased proportionately more and more. So far in 1950 there has been a very slight reversal of this trend, but it is not run long enough to have any significance.

Even assuming that it should later prove to have been the beginning of the end, the whole pattern of expectancy still requires a continued uptrend in stock prices for several months at a minimum. Exactly when and where the top may be I leave to those who may have a crystal ball, but I feel confident that the final peak still lies well ahead of us.

* * *

Chairman White: Thank you, Mr. Drew. Now it gives me a great deal of pleasure to turn to the University for our next speaker, Mr. Anthony Gaubis. After his graduation in 1924, Mr. Gaubis joined the staff of American Telephone & Telegraph as chief economist, where he served for three years and observed at close range the operations of A T & T forecasting, long-range forecasting. This is a case of analysis in which he has specialized.

He became a vice-president in charge of research for an investment affiliate of the Irving Trust, and thereafter for many years he was in Detroit as vice-president in common stock research of Investment Counsel, Inc.

Then, for a short time, he was with a New York Stock Exchange firm as head of the investment advisory division before establishing his own investment counseling business in October 1946.

He publishes an investment timing service, a weekly service. Perhaps he will tell you more about it. It gives me a great deal of pleasure to introduce to you Tony Gaubis.

* * *

Mr. Anthony Gaubis: Mr. Chairman, fellow members, and guests: In all honesty, I simply cannot avoid the conclusion that investors should now be more cautious than they had need to be at any time during the past three years. To be specific, I believe that there is a much greater chance of a decline of at least 30 to 40 points from the 204-208

level of the Dow-Jones industrial average, within the next three to six months, than there is of an advance of 15 to 20 points. Since this would mean a decline of 25% or more in the price of the average stock, I have been advising my clients to reduce their holdings of equities to substantially below those maintained while the Dow-Jones industrials were in the 160-200 range.

* * *

Before I go into some of my reasons for this conclusion, I should like to explain that I am not a chronic pessimist. As a matter of fact, most of my errors have been on the bullish side. I was definitely bearish in the spring of 1946, in face of prevailing opinion which was summarized by a prominent analyst, who remarked that: "Anyone who thinks there is a chance of a 40- to 50-point decline in the Dow-Jones industrials (from the 210 level) has no business being an investment counselor." I turned bullish after the decline late in that year, as my work had indicated that the October 1946 low of about 161 in the Dow-Jones industrials was not likely to be broken materially, if at all, at any time in the next three years; and that whatever highs were seen in the leading industrial stock averages during 1947 and 1948 were reasonably certain to be exceeded by sometime in 1949.

I am giving you this background principally because it has a major bearing on my reasons for being cautious at the present time.

IMPORTANT FACTORS IN ECONOMY

I did not go along with those who were looking for a repetition of the 1920 type of business and market decline in 1947, 1948, or 1949, primarily because of the presence of several very important supporting factors in our economy. These included:

1. There was a large backlog of pent-up demands for such cyclical products as automobiles, agricultural implements, and railroad equipment, as well as industrial and residential buildings. As long as the urgent pent-up demands in these fields were unsatisfied, it was virtually impossible to have a downward spiral in business. Cancellations of orders by one group of buyers did not materially affect production, because others were ready and anxious to secure the goods that were released.

2. Ever since the end of the war, we have been enjoying an average export surplus of about \$6 billion a year. In 1946 this surplus amounted to \$4.8 billion; in 1947 to \$8.775 billion; and in both 1948 and 1949 to about \$5.5 billion. This meant that a substantial part of our surplus capacity was being absorbed, on balance, in foreign markets, and therefore was helping to maintain our domestic payrolls without using up the buying power of the workers.

3. A further supporting factor was the low level of consumer borrowing, which was being kept in check by the Federal Reserve Board. This helped to keep intact a reserve of buying power which could be released (and was released last year) as soon as the supply of goods exceeded the requirements of cash buyers.

4. Another point was the widespread holdings of Government bonds and wartime cash savings, which made it possible to convert the *pent-up demands* into *effective demands*.

I believe you will all agree that these principal supporting factors of the past three years are becoming progressively less potent. It is now possible to buy any make of car without paying a premium, and most cars are available at a discount from list prices. The same thing is true of certain electrical appliances. In spite of the pickup in new orders for railroad equipment during the past two months, it seems unlikely that freight car production will climb back to the levels of 9,000 to 12,000 units a month turned out during the first half of last year.

CONSUMER CREDIT ROSE IN 1949

Consumer credit rose by about \$2 billion in the last six months of 1949 to a new all-time record. Although a further rise is possible before we exceed prewar ratios to consumer incomes (unless there should be a sharp decline in wage payments), the fact remains that a larger proportion of the next twelve months' payrolls has been mortgaged than at any time since before the war. In this connection, it is pertinent to note that Federal Reserve studies indicate that almost two thirds of our 30 million families whose incomes are less than \$5,000 a year have redeemed all of their Savings bonds.

Our export surplus is also starting to decline, even though the full effects of devaluation will probably not be witnessed until sometime this spring or summer. It would not be surprising if, by that time, our next export surplus declined to between one third and one half of the 1947 rate of almost \$9 billion a year. Building activity will probably hold up quite well for a little while longer, but expenditures for new plant are declining, and apartment house vacancies are beginning to show up in a number of cities.

* * *

There are, of course, certain offsetting factors that must be kept in mind. The first of these is the high yields available on common stocks. I personally feel that this is not too important, because most buying and selling of stocks is motivated primarily by a desire for capital gains, with income being a secondary consideration. Furthermore, the influence of the yield factor is largely canceled by the low level of new capital accumulations in the hands of normal buyers of equities. As long as income taxes are held at such a high level that individuals in the higher brackets have neither the savings nor the incentive to buy stocks for income, we are faced with a certain amount of attrition in our capital markets. To be sure, sales of mutual funds to small investors are taking up some of this slack in demand, but I suspect that the bulk of such investments merely represent savings that would have come into the market in due course, through new brokerage accounts.

Another supporting factor in the stock market is the fear of inflation. It is hard to avoid the conclusion that our national fiscal and labor policies are undermining the basic value of the dollar, but experience during other periods in the United States and abroad shows that an undercurrent of inflation does not prevent cyclical declines in stock prices. Anyone who will take the trouble to go over the files of early 1937 will see what I mean. At that time the unprecedented phenomenon of seven consecutive years of deficit financing and the low level of interest rates were heralded

as the dominant market factors. I think we should all bear in mind that deficit spending at the rate of \$4 billion a year, under current conditions, represents the equivalent of less than 2% of our national product. An increase in deficit spending to, say, \$20 billion a year or more would, of course, change the picture quite materially.

We are also hearing a great deal about the probable effect on our stock market of the investment demands of the newly created or prospective pension funds. I think that we are jumping to conclusions if we count on a substantial increase in equity buying from this source during the twelve to twenty-four months immediately ahead. At best, it seems unlikely that purchases for pension fund accounts will offset the sales by those who follow the formula plan principles of investing.

* * *

The outlook for the stock market on the basis of the economic factors I have just outlined is supported by various international and psychological forces such as the lack of confidence in the Administration and the virtual certainty of disturbing developments in Europe during the next few months. We have won the war but lost the peace and it looks as though we are losing the cold war. If there were not for this domestic and world political background there would be more reason for expecting stock prices to climb back to prewar ratios of earnings and dividends.

* * *

A final point I want to mention in support of my current market views is the implication of certain long-term technical studies which I have followed in actual practice since 1930. That is, the apparent existence of three, overlapping ten-year cycles. Like most technical work, I believe this approach should be used only as an additional means of checking conclusions drawn from more fundamental studies.

DURATION OF PHASES VARIES

The duration of the upward and downward phases of these cycles tends to vary somewhat, so that they are not susceptible to exact mathematical formulas. They are more help in forecasting the approximate timing of cyclical turning points than they are in telling us how large an advance or decline is likely to be seen during any particular period. Presumably, this is because the *extent* of any movement depends to a considerable degree on the actions of businessmen and politicians, as well as on fundamental conditions. Over the past sixty years, the declines following the indicated timing of cyclical peaks under this approach averaged between 30 and 40%, with only one reaction amounting to less than 20% in one or more of the leading stock averages.

The cycle with which we are concerned at the moment points to a probable market pattern this year comparable to that of either 1940 or 1946. It may be worth noting that during the early months of 1940, the prevailing view was that a substantial decline in stock prices was unlikely because of the increase in our expenditures for armaments and the orders being received from England and France following the outbreak of World War II in the preceding September. In 1946, this timing work gave us definite warnings of a probable sharp decline in stock prices, in fact

such supposedly dominant bullish factors as the record-making level of bank deposits, the pent-up demand for goods, and the imminent collapse of price controls.

* * *

In closing, I want to make it clear that my remarks have been concerned primarily with the cyclical, rather than the very long-term outlook for stock prices. It is too early to say whether the next correction or "bear market" will run its course within a few months, or whether it will extend over a period of a year or longer. When this decline does take its course, I believe that the stocks of well-managed and properly situated companies will again be a purchase in preference to Government bonds, for a subsequent advance well above the highest levels touched at any time in the last eighteen to twenty years.

* * *

Chairman White: Thank you, Tony Gaubis.

Now, it gives me a great deal of pleasure to bring to you an illustrious predecessor as writer of the Hornblower & Weeks market letter.

We turn again to Harvard. Mr. Fitzgerald graduated from Harvard in 1923 and from the Harvard Business School two years later. After a short time in operating a Boston stock exchange seat, he joined Latham & Company in New York, then came to Hornblower & Weeks in 1927, and wrote the market letter from 1928 to 1931. He headed the statistical department in 1934 and then he went to California and opened a gold mine in a county out there. (Apparently, it was just another hole in the ground.) He decided, therefore, to stay in California, and has been connected with a company out there. He is head of their analytical department since 1928, and he has been a partner in the Dean Witter Company since 1940. In 1941, he resigned the service, served in the Chemical Warfare Service, and became a lieutenant colonel. Essentially, his work was as a controller, and he was awarded the Legion of Merit in 1945. The records indicate that he is the only statistician to win the Legion of Merit in the Army.

It gives me a great deal of pleasure to introduce to you, Bill Fitzgerald of San Francisco. (Applause)

* * *

Mr. Philip J. Fitzgerald: Before considering the future prospects of the stock market, it is wise to survey the investment background as we go into the spring of 1950.

INVESTMENT BACKGROUND

POSTWAR BUSINESS LEVELS. Business is currently very good and has been at record-breaking levels for the last four years. Industrial production is running about 75% above the average level of the prewar period, and the personal income has tripled—having risen from \$71 billion in 1939 to the tremendous sum of \$212 billion in 1949.

POSTWAR MARKET LEVELS. During this period business has prospered mightily, with earnings and dividends surpassing all previous levels. At the 200 level, the Dow Jones industrial averages are cheap by any past investment measurements. The 30 leading stocks in this average have invested more than \$60 of their earnings during the past decade, so that their reinvested earnings exceed the average

price advances they have had from the prewar level. Their 1949 earnings are estimated at around \$23, which indicates a price times earnings ratio of about 9 times. This compares with the prewar period when the average selling price was about \$140, or over 16 times the average earnings of the five-year period 1935–39. In the five prewar years, the dividends averaged \$6.30, to yield about 4.5% as compared to a 3½% yield on Aaa bonds. Last year's well-protected dividends amount to about \$12.79 and provide a very generous 6.36% yield, compared with the present 2.5% return on Aaa bonds. Furthermore, the present dividends are covered by an extraordinarily wide margin of earning power.

MONEY SUPPLY VERSUS STOCK PRICES. Figure 1 compares the tremendous expansion that has taken place in our money supply with the very moderate increase that has taken place in the over-all value of the stocks listed on the New York Stock Exchange. This relationship dramatically reverses the situation of the late 1920's when stock prices were skyrocketing and the money supply remained relatively constant. Anyone looking at the diagram must conclude that money appears to be more plentiful than stocks.

This increase in the money supply was the source of the inflationary pressure which pushed up commodity prices in the war and postwar periods. The developments of the past year pretty well assure that this inflationary pressure has spent its force as far as commodity prices are concerned. In fact, if it were not for artificial restrictions, we would probably be experiencing a sizable deflation in commodity prices. Along the farm sector we are holding prices by such amazing procedures as the outright destruction of 100 million bushels of potatoes and the burying of at least \$100 million worth of eggs in a cave in Kansas. The purchase of grains, cotton, and other commodities at prices and under conditions that assure that they can never be used for human consumption is fundamentally just as unsound economically, even if the methods used are not so spectacular. Along the industrial sector, the fuels are the most conspicuously supported commodities. Mr. Lewis is holding up the price of coal by limiting the miner to three days of work each week while the oil industry is holding up its price structure by shutting in about 1 million barrels a day of potential output. Although the economics point to lower commodity prices at a later date, from the current market point of view it would appear that the price structures generally will be supported at levels that will assure most industries very satisfactory profits at a high level of business.

At the present time, then, it would appear that the investor should not be concerned with the inflationary effects of the money supply on commodity prices, but his primary concern should be with the prospects his investments have of losing their real earning power. Certainly, the huge increase in the money supply has influenced declining interest rates which are, after all, only the riskless rent value of money. Although many investors have rather thoughtlessly considered that the low interest rates of the past decade were the result of some sort of legerdemain on the part of the U. S. Treasury, the fact of the matter is that the governmental pressure has been used to keep interest rates up over the past four years. In order to combat inflation which

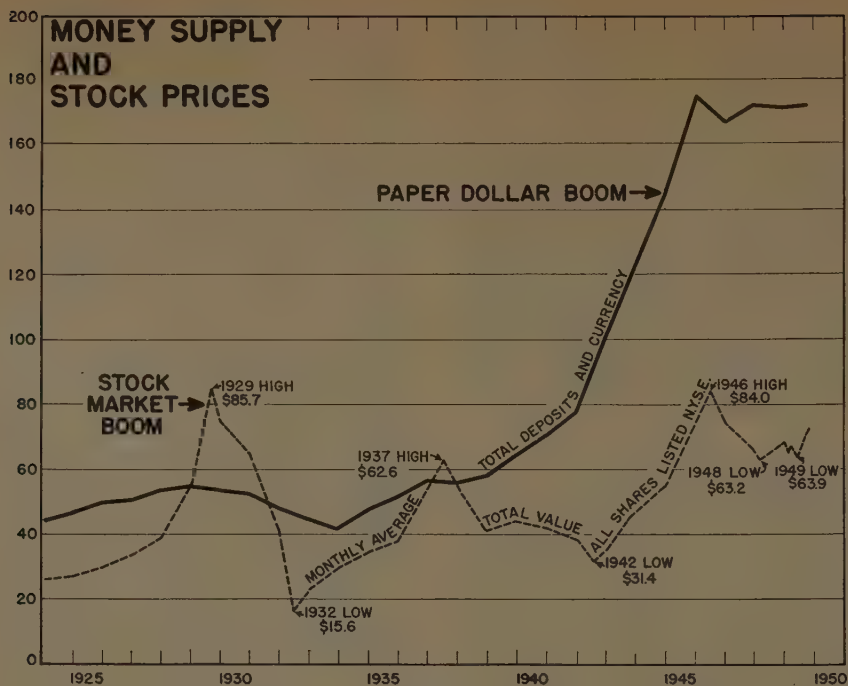


Figure 1

was taking place in commodity prices, the Federal reserve raised the reserve requirements of the member banks to about twice their normal level. This has had the effect of drying up about half the legal lending power of the banks; yet it never left the business community pinched for funds. Now that the pressure of price inflation is passing, the Federal Reserve can be expected to reverse its policy, and the bank requirements will doubtless be lowered by successive steps to their normal prewar levels. This will mean that, at a time when the business needs for credit will be contracting, the available credit resources will be expanding so that increasing pressure from the idle funds can be expected to become a more pronounced stock market factor.

INVESTMENT BUYING AND SPECULATIVE SELLING. For over three and one-half years speculative selling and investment buying have held the market in a narrow trading range—the longest on record—in the face of record-breaking business that has resulted in unprecedented earnings and liberal dividend yields. The selling has been described as speculative since for the most part the sellers have sold their securities because they believed that they had a prospect of repurchasing them within a reasonable period at lower prices. The market reached a low in the trading range in the fall of 1946 under the pressure of sellers expecting that the wartime inflation would plunge us into another 1920-21 type of depression. The market reached another low in the trading range in the spring of 1947 when sellers were discounting chaos in Europe. In February 1948 the collapse of speculation in farm commodities revived fears of a 1920-21 type of depression since a break in farm prices ushered that one in. The postelection selling reflected the concern of investors fearing the Fair Deal, and by the spring of 1949 the soft goods lines of industry were at dead

center in their transition from a "sellers'" to a "buyers'" market.

By June 1949 all the fearful investors had apparently sold all the stock they cared to, since, after the market gave conclusive "sell" signal, no more stock came out. Although this surprised the chartists and the technicians, any one who had followed the course of the trading in 1947 and 1948 must have recognized that the market was in a sold-out condition. In both years the trading volume fell to as low as 15% of the shares listed on the New York Stock Exchange, and for the leading investment issues the volume fell to negligible proportions. As the trading volume tended to dry up, the investment character of the buying became evident. Stocks were being bought on a long-term investment basis by those who believed they represented sound values and provided liberal yields. Among the buyers were the endowment funds of the richest universities whose portfolios are now over 40% invested in common stocks. Their buying has been duplicated by other true investors seeking income, and the stocks they have bought will not be sold until their prospective dividend yields seem unsatisfactory.

INVESTMENT OUTLOOK

BUSINESS PROSPECTS. Against a sold-out condition of the stock market and a strong investment background of record levels of business, earnings, and dividends, we must consider the business prospects for 1950. Most economists are in agreement that the first half of 1950 will be an excellent one with a distinct tapering likely to occur in the fall. In fact, most economists are in such complete agreement on this prospect that one is prompted to remember how completely they agreed on an inevitable business

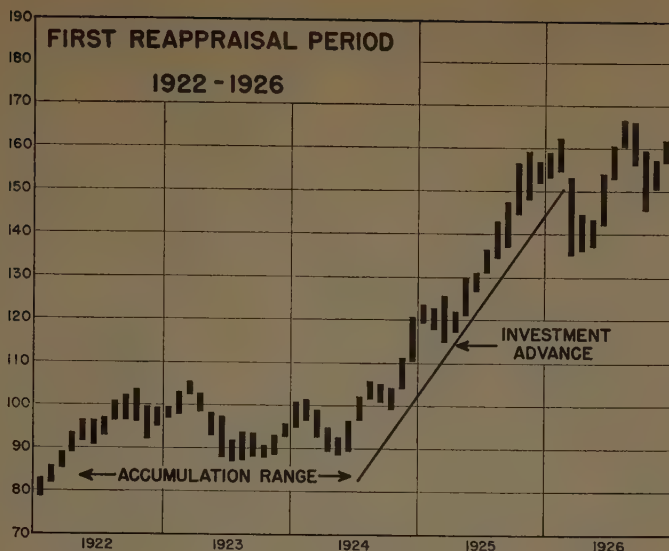


Figure 2

ck in 1947. One of the few economists who was right the fine business in store for 1947 and 1948, the correction that occurred in the spring of 1949, and the business pickup that occurred last fall differs with this pattern. It looks for a little overproduction in the first quarter in most lines where stocks are being built up to take advantage of the \$2.8 billion which the G. I.'s are getting as an insurance refund. This opinion expects business to pick up briskly next fall, after a dip this summer, to be followed by a demand for new industrial equipment that will cut down costs.

Although this meeting is apt to discount any prophecy, it does appear that 1950 has an excellent chance of being a very good business year since:

1. National income is at a very high level assuring an excellent demand for goods at retail.

2. Artificial props, which have helped business since 1946, all promise to be continued in considerable force, including:

(a) A heavy armament program which is the largest single Government expenditure.

(b) A farm assistance program which will buttress farm income.

(c) A foreign aid program which promises to maintain exports at satisfactory levels.

3. The volume of new public construction on the part of states and local governments promises to rise at least 10%, which will cushion a prospective decline in the capital goods expenditures of industry.

4. Home building is in for another huge year with over 1 million new homes in prospect, which means fine business for the building material and home appliance companies as well.

5. The automobile business promises to enjoy another fine year. A backlog of demand is clearly shown since used car prices still remain very high in relation to the price of new cars by prewar standards. Although a sharp seasonal slowdown may occur this fall, it will prob-

ably only signify a return to the normal seasonal pattern of the motor trade.

In any event, by moving up, through, and out of the trading range, the market appears to have come to a thoughtful conclusion that the future business prospects are reasonably bright. Particularly impressive was the market's disregard last fall for such critical business news as the British devaluation and the coal and steel strikes. When a market disregards the obvious news its decisions are usually important, and its recent strength in the face of the coal crisis must be considered impressive. Except for brief periods of hysteria, the market has always been the best prognosticator of the business future. After three long years of doubt and without any trace of hysteria, the stock market has clearly arrived at a positive conclusion.

LIMITED RISKS. Because of the political prospects, the risk of buying the Dow-Jones industrial averages at the 200 level is very limited for the investor purchasing primarily for income purposes. What risk there is lies in the obvious possibility of deflation accelerating to a point that suddenly plunges the economy into a recession of the 1937-38 variety. A review of that period clearly shows that political factors serve to limit such a risk. In 1938 the Congress, which had been worrying the year before over the dangers of inflation, was so shocked by the paralyzing deflation that had gripped the United States that both parties united to speed President Roosevelt's "spending-lending" program towards its early enactment. Investors then realized that we were adopting as national policy a program of spending our way out of a depression. Fearing for the ultimate value of their money, investors preferred equities to cash. Their buying made June 1938 one of the most violent stock market advances on record and returned the industrial average from the 105 level to the 145 level in three weeks' time.

If the present Congress were suddenly faced with a deflationary crisis, it is most likely that they would react again to a new "spending-lending" proposal just as they did in



Figure 3

1938. It does not take much imagination to visualize that the scope of any such "spending-lending" program would be so huge as to cause an even greater measure of investment concern. If only a small fraction of our present money supply and the \$260 billion national debt attempted to shift into the equity market, the ensuing scramble could be expected to run the stock market back to at least the 200 level. This prospect practically provides the present-day investor with a "political put" on current market levels.

POTENTIAL MARKET LEVELS

POTENTIAL BUYERS. The present dividend payments, which are covered by a very wide margin of earning power, provide the Dow-Jones industrial averages with a 6.36% yield, $2\frac{1}{2}$ times the yield available on Aaa bonds. In the past the yield on common stocks was only about 50% greater than the yield on Aaa bonds. If business stays in the vicinity of the present levels, the pressure of investment buying, attracted by the historically liberal dividend yields, promises to send the market higher.

True investors who will continue to buy and hold sound investment values at liberal yields are:

1. The endowment funds, trust departments, and private investors already considered.
2. The fire and casualty companies whose portfolios by prewar investment standards are short of at least \$1 billion worth of common stocks.
3. The open-end investment trusts.

The open-end investment trusts are bringing into the market the savings of smaller investors who never before bought common stocks. These investors have entered the market indirectly via the shares of open-end investment trusts where they hope that a combination of diversification and administration will limit their risks. The growing sales of the shares of these trusts has been the most important single development in finance since the war. By the last quarter of 1949 their sales amounted to about \$1,500,000 a business day, and the bulk of these funds has had to be

invested promptly in order to provide the dividend yield that were expected by the buyers of the investment trust shares.

A more general public acceptance, wider advertising, and a rising stock market have facilitated the sales of open-end investment trust shares in 1949 and will continue to do so in 1950 if business remains reasonably good. Over the next several years the potential money available for such investment promises to be materially increased by the maturing of the saving bonds which were so heavily sold during the early years of World War II. These maturities will increase from a total of about \$1 billion in 1950 to a total of \$8.8 billion in 1954. It is reasonable to expect that a sizable proportion of the maturing savings bonds will be attracted directly or indirectly to the stock market, as well as some portion of the very much larger total of other types of maturing Government bonds which are held by private individuals. It seems very likely that the burden of refunding the national debt will fall largely on the country's banking structure.

It is too early to estimate whether the pension funds which are just starting will be significant buyers of stock to balance, but their longer-range effect on the bond market appears to be self-evident.

CONCLUSIONS

TECHNICAL MARKET HISTORY. From a technical point of view, it would seem appropriate to review the market action that followed on the break-through of the only other prolonged trading ranges that have occurred in the past thirty years. These are presented in Figures 2, 3, and 4 where the evidence plainly shows that sold-out markets have very little disposition to react until after they have advanced to levels that amply discount their investment potentials.

1922-1926. Between the summer of 1923 and the summer of 1924 the market, which was encompassed within a narrow trading range, disregarded the fine level of business

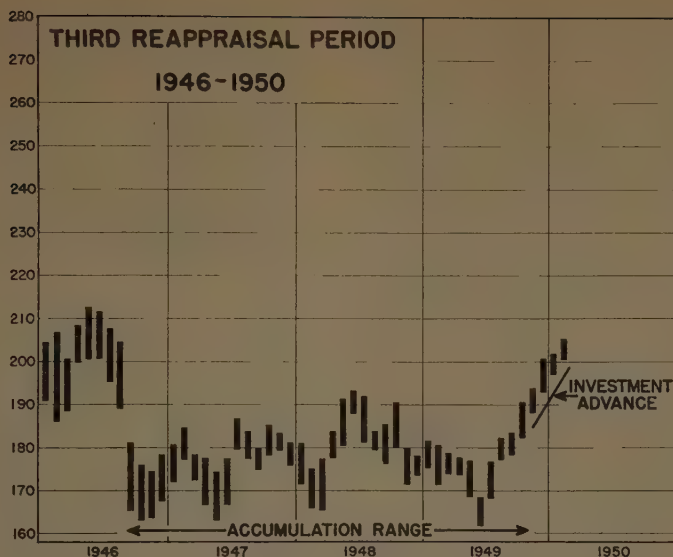


Figure 4

the earnings, and the dividend yields available on the leading investment grade stocks. Investors were just too skeptical of the level of business since, by 1912 standards, the prices of automobiles and other luxuries like refrigerators seemed far too high to last. With Mr. Coolidge's nomination, the constructive political atmosphere brought into focus the following facts:

1. The young chemical industry was in for a prolonged period of expansion.
2. The shift from the use of direct to alternating current would cause the rebuilding of every power plant in the country and provide everyone with lower power costs.
3. The automobile had become a necessity which was building cities in the Middle West and was building roads and suburbs all over the Nation.

Matching this fine economic news was the financial fact that created more buyers than sellers. The Federal Government was retiring nearly \$1 billion worth of debt each year, and part of this money flowed into the market which was in a sold-out condition. The combination of these forces produced a market advance on an investment basis until the late fall of 1925 when a speculative sentiment took over.

From our point of view it is important to note in Figure 4 that the investment phase of the advance lasted a year and a half—a full year after the market had moved out of the trading range—and that the investment advance carried the market forward 60 points in the Dow-Jones industrial averages, a gain of more than 50%.

1933-36. A similar period of digestion followed the IRA uprush in the spring and summer of 1933. For a year and three quarters the market traded in a narrow range of approximately 85-105 while investors debated as to whether the economy would not collapse into its previous condition of paralysis. In due course a growing sense of confidence in the existing rate of earnings began to develop, and again this coincided with a new source of funds going into the market. This time it was European money which came to our shores in the form of gold for refuge from the

worsening peace conditions on the Continent. These new funds in the market again created more buyers than sellers, and again it is significant to note the extent of the advance that occurred during the course of the next year before the first significant speculative shake-out late in 1936. This time the market advanced more than 50 points in the industrial averages after it had moved out of the trading range. This represented a gain of slightly less than 50%, and again the investment advance was followed by a period of less thoughtful speculative advance.

1946-50. This spring finds the market reasonably priced in relation to business activity, earnings, and dividends. Strict chartists are concerning themselves with the fact that the market has advanced some 45 points in the industrial averages without any appreciable correction. A more realistic observer might consider that, with improved sentiment, the market has crossed through the trading range without hesitation, just as it did in 1924 and again in 1935. It is now engaged in consolidating its advance by holding firm in the face of very unsatisfactory news from the coal industry, and with what appears to be firm determination to move toward higher levels in due course. This time the growing sales of open-end investment trust shares is supplying the new money which is serving as the catalyst for the advance.

With individuals, old-line institutions, and the growing investment trust industry all faced with the continuing problem of investing funds at adequate returns, it is reasonable to expect that the market has an excellent chance of advancing from around the vicinity of the 200 level. The optimistic, or those more impressed by tradition, might very well expect a 50% investment advance that would be comparable in scope to the 1924-26 and the 1935-36 precedents. A more moderate observer will probably feel that continuing concern over the international and the domestic political situations will limit the investment phase of any advance to, say, half of the previous proportions—or a 25% advance at best. Since this would take the in-

dustrial averages into the vicinity of 250 where they would afford only a 5% yield on last year's dividend payments, the yield factor alone might very well provide a barrier to further investment participation.

However, a real investor is primarily concerned with the merits of buying the Dow-Jones industrial averages at around the 200 level rather than with the possibility of advance, even though such a probability may help him arrive at his purchasing decision. At the 200 level, the real investor will be getting more assets, more earnings, and a greater yield than has ever been available except in periods of the direct business depressions. On this basis he should be able to buy with confidence.

* * *

Chairman White: Thank you, Phil Fitzgerald. That is a real bull market talk, a regular Hornblower & Weeks market letter.

Our last speaker is a newspaper man. He was a graduate of the University of Michigan in 1925 and he is not "bearish." He got his newspaper experience in New York City on a Brooklyn paper and a Bronx paper, I believe, and was a columnist for a while and executive editor of the old *New York Daily Investment News*. He was public utility editor of *Financial World* and wrote for *Business Week*.

In 1942 he went to Washington to set up the War Production Board's confidential weekly magazine. Then he joined the staff of the Office of War Mobilization and Reconversion under James F. Byrnes and General Clay.

In 1945 he returned to newspaper work as financial editor of *The Philadelphia Record*, and, when that fell from under him, he joined the staff of the *Washington Post* as a writer on economics.

Then, a year or two later, he returned to Philadelphia as financial editor of *The Bulletin*, where he now writes a syndicated column published in about 60 newspapers across the country called "Business Outlook."

He has been a writer for *The Saturday Evening Post* and other nationally known magazines. It gives me a great deal of pleasure to introduce Joe Livingston of Philadelphia. (Applause)

* * *

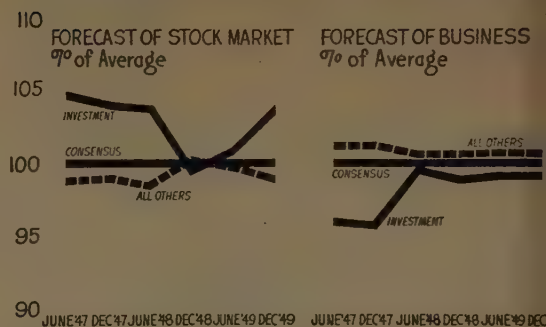
Mr. J. A. Livingston: Mr. Chairman, members of the National Federation of Security Analysts, and guests: I am deeply honored to be on this platform along with experts, talking to experts. I feel a bit like One-Eyed Connolly—the man who always crashed the gate.

According to the program, I have twelve minutes. In those twelve minutes, I want to make two points. The first point is an observation about the psychology of Wall Street, maybe I ought to say the pathology of Wall Street.

You men here are supposed to be hardheaded. You're supposed to render a bloodless verdict on what's going to happen to U. S. Steel, General Motors, American Can, and Kaiser-Frazer. You're supposed to render your opinions to men who are even more hardheaded than yourselves—investment bankers and brokers.

But I don't think you're hardheaded at all. You're just about as softheaded as Americans in general. You're victims of the heritage of this country. America started out

BULLISHNESS—A DISEASE?



with a few renegades from Great Britain, it grew like h and we've been a bunch of optimists ever since. You're optimists. You suffer from an occupational disease—bullishness. And I think I can prove it.

For more than three years I have been sending out questionnaires to economists and business analysts, asking them for predictions about business and the stock market. I did this originally as a journalistic stunt. Seemed like a good idea for my syndicated column. But, as time went by, I realized that I had valuable sociological data. I had a continuing record of the way the minds of experts work. How do they react to events?

One thing I discovered: Just before the stock market break in 1946 the experts—I mean you, gentlemen—were all bullish. After the break, you were almost unanimously bearish—both on business and on the market. I wonder if the experts influenced the market or the market influenced the experts.

I noticed another thing about the stock market experts. Maybe I'd better show it to you in a chart. Now the draftsman made the chart backwards, which shows that he had more sense than I did when I gave it to him. The chart compares the forecasts of the stock market analysts or investment experts with the forecasts of all other experts. The investment analysts are shown in the solid curved line.

Note carefully that in forecasting business the investment analysts were always more bearish—or less bullish—than all the other experts. They fell below the consensus. Note that in forecasting the stock market in every case but one they were more bullish than the other experts. In other words, the investment experts expected the market to perform better than business.

Now, you're likely to ask: Well, what happened in the one case in which the investment experts were less bullish on the market? The answer to that is they were wrong. That was in November 1948, and they were making predictions for 1949. The investment experts forecast a higher than average stock market in June, which was when the market made its postwar low of 161 in the Dow-Jones industrials, and a low for December when the market surged to a post-1946 high.

I'm not telling you all this to give you an inferiority complex. I'm stating facts, and I'm about to formulate a theory. You men have not had the pleasantest time in

world since 1929. The market has been dull for the most part. Trading has usually been less than 2 million shares a day. Most brokerage firms have a hard time breaking even. You know that the only thing that can make business good is higher stock prices. For higher prices bring in more customers. Any pessimists got out of the business long ago. So those who are left have to be optimistic. In Wall Street, the only thing that's left is hope. So, what you're looking for, regardless of what you think of business—of the so-called fundamentals—is projecting your hopes into the future.

Not all forecasters have been optimistic in my poll. Business economists have been almost invariably pessimistic on business conditions. They were afraid, I think, that 1920—would repeat, that their companies might take big licks on inventories. Labor economists were always predicting rises in the cost of living. That was what they were afraid of.

So I formulated a definition: Forecasting is a projection of one's personal hopes and fears. And financial or economic analysis is usually a rationalization of that projection.

* * *

Now I'm here to tell you what I think of the market. So you know what you're getting: Merely an expression and a rationalization of my psychological expectations regarding the future.

I happen to be hopeful.

1. I don't think the market has reached a speculative popping-off phase. Low-priced stocks haven't joined the recession. I compared the prices of low-priced stocks trading under \$16 a share now with August 1946, when the averages were where they are today. Only 9 low-priced averages had bettered their levels. But of the 30 stocks in the Dow-Jones industrials 12 were higher. That suggests there is a blue-chip investment market.

You don't have the taxi driver and the ribbon clerk trying to get rich quick. But you do have new investment money coming in. The new money is going into mutual funds. Wellington Fund made a survey of dealers at my request. It showed that only 10% of dealer sales represented conversion of Government bonds; 20% represented sales of

other securities—switches; 70% represented purchases out of accumulated savings.

2. It still seems to me there are plenty of liquid assets around seeking investment. Yields on common stocks are attractive relative to bonds, and inevitably—just because money is plentiful—it seems to me common stocks will go up. Insurance companies, banks, and other institutional investors will bid up bond prices, which will make stocks increasingly attractive.

3. Bullishness is not rampant. Stroud & Company of Philadelphia recently had a guessing contest among traders on what the Dow-Jones average would be on February 21, 1951. The average was up only slightly to 214.43. There were 190 bulls and 148 bears, or 56 to 44, which in view of the occupational Wall Street bias toward bullishness, constitutes downright bearishness.

More than that, we're in a managed economy. Over the next few years, it seems to me the Government has ample power to guard against any sharp depression—despite the statement of Sewell Avery, of U. S. Gypsum and of Montgomery Ward, that a depression is just around the corner. Too much construction is still to be done; too much money is still to be expended on national defense.

Thus, the fundamental for a strong stock market, in my opinion, exists: Strong business. My hunch is that sometime this year the market will exceed the highs of 1946. And that we won't get into a real bear market until we've exhausted the demand for capital goods, until the country gets overbuilt—in roads, public buildings, housing, new plant. That is several years off yet. And before then 300 in the Dow-Jones average is easily possible.

But remember this: I'm only projecting my hopes. And I dare say that financial editors have just as much of an occupational bias as Wall Street analysts. I thank you. (Applause)

* * *

Chairman White: Thank you, Joe Livingston. Now, friends, we have a very short period in which to get to the afternoon conferences. I wish we had time for a question and answer period. I think it would be very interesting, but would you please rush to your conference rooms immediately?

MINNEAPOLIS GAS COMPANY

739 Marquette Avenue
Minneapolis 2, Minnesota

Common Stock Dividend

The Board of Directors of Minneapolis Gas Company, at a meeting held on April 17, 1950, declared a dividend of 25c per share payable in cash on May 10, 1950, to common stockholders of record at the close of business April 26, 1950.

H. K. WRENCH, President



COMMON DIVIDEND

The Board of Directors of Franklin Stores Corporation have this day declared a regular quarterly dividend of fifteen cents per share on all outstanding common stock payable on April 28, 1950, to stockholders of record April 20, 1950.

MARCUS RUBENSTEIN,
Secretary-Treasurer

Dated April 10, 1950.



THE PURE OIL COMPANY

Preferred Share Dividend

The regular quarterly dividend of \$1.25 has been declared on the 5% Preferred Shares of THE PURE OIL COMPANY, payable in cash on July 1, 1950, to shareholders of record at the close of business June 9, 1950.

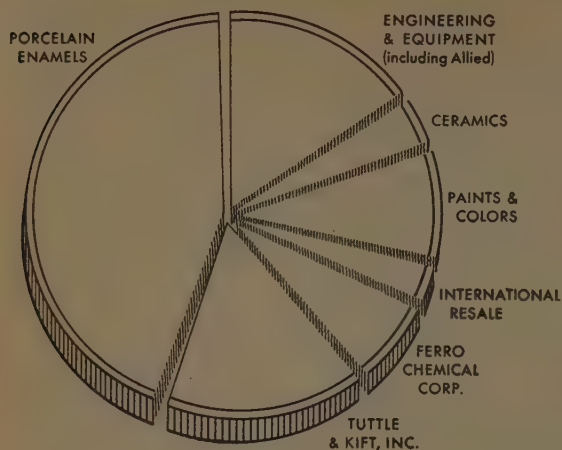
Common Share Dividend

A quarterly dividend of fifty cents per share on the Common Shares of THE PURE OIL COMPANY has been declared payable in cash on June 1, 1950, to shareholders of record at the close of business May 3, 1950.

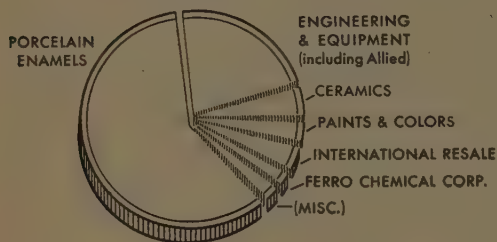
R. L. MILLIGAN, Vice-Pres. & Treas.

1949 DOMESTIC SALES

Ferro Enamel Corp.



1941 DOMESTIC SALES



RATIO OF CURRENT ASSETS

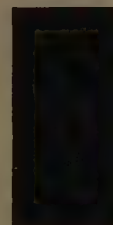
to

CURRENT LIABILITIES

Ferro Enamel Corp.



CURRENT
LIABILITIES



CURRENT
ASSETS

DECEMBER 1948



CURRENT
ASSETS

DECEMBER 1949

FOREIGN SALES

AND PROFITS

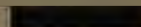
Ferro Enamel Corp.

3-Year Average
1947-1949

ANNUAL SALES



ANNUAL PROFITS



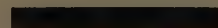
ANNUAL DIVIDENDS



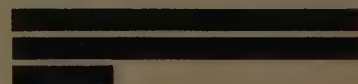
ORIGINAL INVESTMENT



TOTAL INVESTMENT



PRESENT NET WORTH



LEGEND
EACH YEAR LENGTH
BAR REPRESENTS
\$1,000,000

Financial High Lights from 1949 Annual Report

OF THE

FERRO ENAMEL CORPORATION

(AND SUBSIDIARY COMPANIES)

For the year 1949, Ferro and its subsidiaries had a consolidated net income of \$972,983. This amounted to \$2.33 per share on 417,542 shares outstanding. The comparative figures for 1948 are \$1,430,980 and \$3.43 per share. However, at the end of 1948, there were only 347,952 shares outstanding. As a result, earnings published at that time were \$4.11 per share. During 1949, 69,590 additional shares were sold, largely to persons who already were Ferro stockholders.

Without the charge of \$418,515 against earnings of foreign subsidiaries, caused by foreign currency devaluation during the year 1949, our consolidated profit would have been \$3.33 per share, compared with \$3.43 for 1948. This charge resulted from a writedown of foreign subsidiaries' net quick assets and earnings expressed in terms of United States dollars.

It is interesting to note that included in the amount of \$273,565 received from foreign subsidiaries during 1949, \$197,765 represented dividends, and the balance payments for technical service. Dividends received were more than double any previous income in a single year from that source.

Dividends to shareholders of \$1.40 per share were

paid during 1949. A dividend of 35 cents per share was declared on February 13, 1950, payable March 25, 1950, to shareholders of record March 8, 1950.

Cash and United States Government securities held by Ferro Enamel and its wholly owned domestic subsidiaries on January 1, 1950, amounted to \$2,835,000. This is an increase of \$2,084,000 since January 1, 1949. The ratio of current assets to current liabilities, consolidated for Ferro and all its subsidiaries, has improved from 2.30:1 on January 1, 1949, to 3.05:1 as of January 1, 1950.

In addition to the full consolidated statements submitted in our annual report, this year we are including consolidated statements of the domestic subsidiaries.

Our consolidated sales for 1949 were \$24,660,998 as compared with \$29,315,060 sales in 1948. Prospects for all our divisions and subsidiaries are excellent. In addition, it is our belief that new products and new processes being developed by us will expand our sales beyond the average of general business.

R. A. Weaver
Chairman of the Board

*Condensed Consolidated

BALANCE SHEET

As of December 31, 1949

ASSETS

Cash & Government Securities	\$ 3,458,540.89
Notes & Acc. Rec.	2,547,017.13
Inventories	4,569,646.75
CURRENT ASSETS	\$10,575,204.77
Other Assets, including	
Investments, Property, etc.	6,789,871.32
	\$17,365,076.09

LIABILITIES

Current Liabilities	\$ 3,470,995.14
Notes payable, maturing after 1950	4,026,439.64
Other liabilities & reserves	531,780.66
Capital Stock & Surplus	9,335,860.65
	\$17,365,076.09

10-YEAR SUMMARY

YEAR ENDED DEC. 31	NET SALES	NET PROFIT	EARNINGS PER SHARE (After Taxes)
1949	\$24,660,998.00	\$ 972,983.00	\$2.33
1948	29,315,060.00	1,430,980.00	4.11
1947	27,744,498.00	1,268,088.00	4.01
1946	19,416,210.00	707,246.00	2.23
1945	13,335,343.00	419,209.00	1.44
1944	9,906,860.00	395,390.00	1.70
1943	8,210,928.00	458,700.00	1.97
1942	6,119,778.00	181,420.00	.78
1941	7,449,040.00	499,793.00	2.14
1940	5,055,967.00	440,443.00	1.89

*Copies of the Annual Report for 1949 have been mailed to the shareholders and will be mailed upon request to other interested parties.



FERRO ENAMEL CORPORATION, 4150 E. 56th ST., CLEVELAND 5, O.

Manufacturers of Porcelain Enamels • Glazes • Color Oxides • Paints • Paint Driers • Chemicals
Special Refractories • Electric Heating Elements • Controls and Switches • Gas Valves.
Also, Engineers and Erectors of Complete Plant Equipment for the Porcelain Enamel and Pottery Industries.

Outlook for the Chemical Industry

THURSDAY AFTERNOON, MARCH 2, 1950

WALTER K. GUTMAN, presiding.

Chairman Gutman: We will begin the meeting and be as informal as possible, and I shall introduce as little as possible, because we have to hurry. Lucien said he didn't mind when we started, but we had to get out on the button.

The first speaker will be Mr. John McKeen, president of Charles Pfizer & Company. I suppose everybody here is familiar enough with penicillin by now, and maybe you know a little about streptomycin. I didn't think I would have to say anything about that. Mr. McKeen will give a talk on antibiotics.

The next speaker will be Dr. W. A. LaLande.

I have to apologize to Dr. LaLande, because he wanted to bring some slides, and I was told that it would be difficult to arrange for the normal machinery, and I didn't realize that Pfizer would come up with something new; so I told Dr. LaLande not to bring anything up, that we didn't think we were set up for it. I am terribly sorry we won't be able to have some interesting slides.

Dr. LaLande, would you get up and take a bow? (*Applause.*)

I want to warn everybody not to ask Dr. LaLande about salt, because Pennsylvania Salt does not sell any salt.

The last speaker will be Francis Williams of Eberstadt & Company. I am sure a great majority of us here are acquainted with Francis and know how extremely capable he is of understanding what there is in chemistry of importance to us. In other words, what is going to happen from the sales-earnings standpoint of various products, not definitely, but pretty darned good.

Francis, will you stand up and introduce yourself?

After Mr. McKeen and Dr. LaLande have talked, Francis will get up and tell us what to do.

Now, John, will you take over?

* * *

Mr. John E. McKeen: Seven years ago a new class of pharmaceutical preparations, now well-known to all of us as "antibiotics," was born. In this short space of time factory sales have advanced to well over \$150 million, to become one of the country's newest and most vigorous industries. Some idea of the relative importance of this industry may be gained from the fact that by 1948 the New York City Department of Hospitals was already expending over one half of its total drug budget in the purchase of penicillin and streptomycin.

The rapid development of antibiotics illustrates the potential of our industrial system when the public welfare is involved. This "case history" also serves as an exercise in economics—in the functioning of the law of supply and demand and, I might add, the corollary law of diminishing returns.

ANTIBIOTIC MILESTONES

First let me touch briefly on the scientific concept on which this new antibiotics industry is founded.

DEVELOPMENT OF ANTIBIOTICS PREDICTED

In 1877 Pasteur observed with reference to the anthrax bacillus, then scourge of the pastureland of France, that:

It is a remarkable thing that the same phenomenon is seen in the body even of those animals most susceptible to anthrax, leading to the astonishing result that anthrax bacteria can be introduced in profusion into an animal, which yet does not develop the disease; . . . these facts perhaps justify the highest hopes for therapeutics.

Pasteur's explanation of this phenomenon was not altogether correct. He believed that the extraneous bacteria consumed so much oxygen that the anthrax bacillus was literally choked out of existence. Regardless of the accuracy of this observation or the mechanism involved, Pasteur had recorded "antibiosis," the antagonistic activity of certain of the microbiological species, and had predicted the ultimate utilization of this principle in the treatment of infectious diseases.

PYOCYANASE—FIRST OF THE ANTIBIOTICS

The first antibiotic used on humans was pyocyanase, a substance produced by blue-pus bacillus. This product, initially hailed in 1899 as an important step in the conquest of diphtheria, was later proved to be of no therapeutic value.

DISCOVERY OF PENICILLIN

We know today that there are many kinds of micro-organisms excreting chemical substances which are powerfully toxic to the other species. However, only an infinitely small fraction of these micro-organisms are reasonably free from dangerous side effects when used on human beings. Penicillin, perhaps the most outstanding antibiotic yet developed, derives its name from the mold substances, *Penicillium chrysogenum* and *Penicillium notatum*. This antibiotic was discovered in 1928 quite by accident in a contaminated petrie dish by a British scientist, Dr. Alexander Fleming.

Little was done with penicillin until 1939, when, spurred by the discovery in America of another new antibiotic, tyrothricin, Florey, Chain, and their associates, returning to the original Fleming culture, proceeded with the isolation of penicillin.

Clinical work on human beings was not undertaken until 1941.

MERCK, PFIZER, AND SQUIBB START COMMERCIAL PRODUCTION OF PENICILLIN

The British, short on facilities and materials necessary to conduct the research and development required on penicillin and spurred by the urgent wartime need for a superior drug for the treatment of nonspecific infections, dispatched

a committee of scientists to the United States in 1942 for the purpose of enlisting the assistance of the American drug industry in this undertaking. The original U. S. pharmaceutical houses collaborating in this undertaking were Pfizer, Merck, and Squibb. These three firms agreed to pool their scientific advances through the mediation of a governmental co-ordinating committee. Other pharmaceutical houses later joined this group until by 1948 there were approximately 14 manufacturers of penicillin in the United States.

The first penicillin was sold to the United States Government in 1943 at a price of \$20 per 100,000 units, the amount now used to treat one case of pneumonia over a period of 8 hours.

Intensive research was instituted in many university and industrial laboratories, both here and in England, to find means of improving the original flask process, and also to determine the chemical structure of penicillin with the ultimate aim of developing a synthetic method of production. Although through these efforts eventually penicillin was synthesized in the laboratory, it soon became apparent that no synthetic method could compete with the coincidentally developed large-scale fermentation processes in operation today.

BACITRACIN—ANOTHER NEW ANTIBIOTIC

This product was isolated from a spore-forming soil bacillus at Columbia University College of Physicians and Surgeons in 1943. The product is manufactured by Commercial Solvents and Pfizer and is particularly useful in certain types of surgical infections.

STREPTOMYCIN—FIRST OF THE MYCINS

In 1944 Dr. Selman Waksman of Rutgers University discovered streptomycin. Because of the widespread interest in this product an elaborate co-ordinated clinical research program was established to determine the best ways of using streptomycin in human tuberculosis.

Commercial production was begun in 1946 by Merck, Pfizer, and Squibb, the total manufactured in that year being 1,132 kilos. This has risen steadily, 1949 production totaling 83,699 kilos, 70½ of which was used in the treatment of tuberculosis.

POLYMXIN

Polymixin is effective against Gram-negative organisms and has been employed experimentally in a variety of conditions. It is under development at Chas. Pfizer and Company and Burroughs-Wellcome.

AUREOMYCIN—THE GOLDEN DRUG

Developed by Lederle Laboratories in 1948, Aureomycin is a highly successful product in the treatment of diseases caused by a wide spectrum of micro-organisms including both Gram-negative and Gram-positive species. It is therefore effective in some conditions previously treated by either penicillin or streptomycin.

CHLOROMYCETIN

This product of Parke-Davis and Company also has a wide usefulness. Obtained originally in 1947 from fermentation sources, the structure is relatively simple, it being the only antibiotic that can be manufactured economically by chemical synthesis.

TERRAMYCIN—THE NEWEST ANTIBIOTIC

The latest development in antibiotics is Terramycin, announced in January by Chas. Pfizer and Company. Beginning in late 1949 an exceptionally comprehensive clinical investigation program was undertaken. At the present stage of clinical investigation this antibiotic has evidenced singular effectiveness in the treatment of a wide variety of medical and surgical conditions due not only to infection by bacterial species of the Gram-positive and Gram-negative types but also to certain rickettsial and virus diseases. Specific details of the nature, indications, and administration of this product will be announced by the Pfizer management during the next few weeks.

MAJOR DOMESTIC AND FOREIGN PRODUCERS

It is estimated that about 80% of the world's total penicillin (Russia excluded) and 90% of the total streptomycin are produced in the United States. The important penicillin and streptomycin producers in the United States are listed in Table 1.

TABLE 1. U. S. ANTIBIOTIC MANUFACTURERS

Penicillin	Streptomycin
Abbott	Abbott
Baker	Heyden
Bristol	Lilly
Commercial Solvents	Merck
Cutter	Pfizer
Heyden	Schenley
Lilly	Squibb
Merck	Upjohn
Pfizer	
Schenley	
Squibb	
Upjohn	
Wyeth	

THE PUBLIC INTEREST AND THE CONSUMER

It was stated earlier that the development of penicillin and streptomycin indicated the potential of the American industrial system when the public welfare is involved and also furnished an excellent case history in the functioning of the law of supply and demand and the corollary law of diminishing returns.

TABLE 2. ANTIBIOTIC PRODUCTION

Year	Penicillin		Streptomycin	
	Production	Bulk Price	Production, kilos	Bulk Price per gram
1942	N. a.	N. a.		
1943	21*	\$20.00†		
1944	1,633	3.37		
1945	7,326	0.66	3	\$25 - \$30
1946	27,109	0.44	1,132	\$6.31
1947	41,038	0.24	9,687	2.70
1948	95,855	0.16	37,709	1.27
1949	133,229	0.045	83,699	0.48

*Billion units.

†Bulk price 100,000 units.

The supply of penicillin has increased 6,068% from 1943 to 1949, and the supply of streptomycin 2,225% from 1945 to 1949. During the same intervals the price of penicillin dropped from \$20 per 100,000 Oxford units to \$0.045 and

streptomycin from \$25 to \$30 per gram to \$0.48 per gram. When the trends in penicillin and streptomycin prices are related to consumer chemical and pharmaceutical prices over comparable periods, it is clear that the record of the antibiotic industry from the viewpoint of the public welfare and the consumer compares most favorably with the performance of any other known American industry.

THE INDIVIDUAL PRODUCER

The question remains as to just how the typical producer has fared. In the case of penicillin the Government, because of the urgent wartime need for a superior anti-infective, made many exceedingly attractive concessions to the existing or prospective penicillin manufacturers, such as Government-financed facilities and special priorities. As a consequence of this situation many pharmaceutical companies lacking the basic production know-how were drawn into the antibiotic market. By the end of 1948 the artificially stimulated wartime productive facilities were considerably in excess of the demand for the product. This resulted in widespread distress merchandising—a matter of primary concern to the penicillin industry. This condition probably will continue as long as there is excess productive capacity. Furthermore, even were the demand to equal full operating capacity, the opportunities for profit taking can never return to previous levels in the prevailing price structure.

The situation of streptomycin differs in certain respects from that of penicillin. Since streptomycin was introduced in 1946 after the termination of hostilities and a majority of the manufacturers were already heavily committed to the production of penicillin, many houses were content to adopt a wait-and-see attitude. However, despite the smaller number of basic producers, the competition in streptomycin was quite as intensive as in penicillin, owing unquestionably to the limited domestic market for the product and its specialized nature and usage. The product, nonetheless, has stood up amazingly well by virtue of its unprecedented foreign demand.

THE LONG-TERM ANTIBIOTIC OUTLOOK

It must be concluded that neither penicillin nor streptomycin furnishes any real indication of the future of the antibiotic market.

In the case of penicillin, certain manufacturers, to offset falling profits, have introduced a number of specialty forms and dosages, the larger pharmaceutical houses with extensive distribution setups enjoying some limited success in such ventures. However, this was at best a temporary alternative. A more permanent and realistic solution lies in the development of completely new and exclusive antibiotic specialties. This is an exceedingly costly and rigorous alternative; nonetheless, it is the avenue of approach being most intensively explored by several of the leading antibiotic houses today.

Although the preceding observations paint the darker side of the antibiotic picture, viewed in their true perspective many of these difficulties should be considered as the typical growth pains of a new industry. However, it is not too early to comment on one very salutary development which I believe is emerging slowly out of the current antibiotic situation. This is the growing realization of the

vital importance of research and operating know-how in the company structure. In this connection, Dr. Fishbein, former editor of the *Journal of the American Medical Association*, recently stated:

Twenty-five years ago the drug industry and the medical fraternity felt that much was being accomplished if there was one new major discovery in drug research in twenty-five years. Fifteen years ago, the pace of such discoveries had stepped up to about one new major research discovery in a decade. Today, we have come to expect about one discovery in every six months. The pace will increase even faster in the future. It is my opinion that a few years hence, with the wider spread of health care and the increased productivity in new research medicines, the drug industry may easily be the "Number 1 Industry in Dollars" in the United States.

Dr. Fishbein's observation is best evidenced by reference to Table 3, covering the development of major product types in the ethical drug industry over the last twenty years.

TABLE 3. THE ETHICAL DRUG INDUSTRY
Millions

	1929	1935	1939	1942	1947	1949
Acetylsalicylic acid	\$..	\$..	\$ 5	\$ 6	\$ 12	\$ 15
Antibiotics	..	..	..	1	82	160
Antihistamines	..	..	..	..	2	35
Arsenicals & bismuth preparations	3	3	3	5	4	2
Barbiturates	8	6	9	18	26	30
Biologicals	7	8	9	20	23	29
Botanicals	15	13	16	20	40	50
Endocrines	..	11	17	30	62	70
Sulfonamides	..	..	5	15	28	28
Vitamins	..	14	23	50	133	150
All others	137	78	92	100	133	145
Total	\$170	\$133	\$179	\$265	\$545	\$714

In regard to research and technological advances in the antibiotic industry, I believe that the previously cited reduction in the bulk price of penicillin from \$20 the 100,000 units in 1943 to \$0.045 in 1949 and the cutback in bulk streptomycin prices from \$25-\$30 in 1945 to \$0.48 in 1949 are probably the best indication of the progress made by the industry. In addition, the unique experience gained during the intensive development of existing products unquestionably will be of major importance in the screening programs to produce still other antibiotics yet undiscovered.

In this connection, where's the development of penicillin, from the original observations of Fleming to commercial production took fifteen years, new antibiotics of promise are now being routinely processed utilizing "production line techniques" in a matter of months. Thus the antibiotic manufacturers are unusually well equipped to keep abreast and probably even ahead of technological advances made by other segments of the pharmaceutical industry.

There is an impression among individuals not too well acquainted with the antibiotic industry that with all the recent developments in the field of antibiotics the opportunities for new products are severely limited. This misconception should be corrected. Although it would be unwise to minimize the recent progress made in the treatment of infectious diseases, Table 4 indicates clearly that there remain ample challenges to this new industry for at least several decades to come.

TABLE 4. ANTIBIOTIC SPECTRUM

Indication	Number of Cases*	Mortality†	Product				Therapeutic Efficiency‡			
			Penicillin	Streptomycin	Aureomycin	Chloromycetin	Poor	Fair	Good	Excellent
Nonspecific infections			x	x	x					x
Cancer		190,000								
Pneumonia	128,473	49,924	x	x	u					x
Tuberculosis	117,910	46,584		x				x		
Venereal diseases	798,614	15,000§	x		x	u				x
Influenza	452,101	8,888								
Polio	13,514	1,724								
Measles	612,068	1,224								
Whooping cough	132,814	1,196			x			x		
Diphtheria	16,421	1,163	x				x			
Meningitis	8,035	1,146	x	x	u	u		x		
Dysentery	44,634	898			x	x		x		
Septic sore throat	7,787	451	x		x					x
Malaria	55,693	335								
Typhoid fever	4,221	351				x			x	
Encephalitis	661	373								
Scarlet fever	142,274	207	x			x		x		
Typhus	4,517	142			x	x			x	
Rocky Mt. fever	448	123			x	x			x	
Tularemia	887	109		x	x	u				x

*Median 1942-46.

†Year 1946.

‡Using any one or combination of the above products.

§Mortality level for 1949 probably less than one half this figure.

u—unknown.

In conclusion, I would like to leave this thought with you: We have discussed today a new American industry exclusively occupied with pushing back the frontier of death and easing the sojourn of man on earth. Not only does this industry furnish a refreshing contrast to the advent of the hydrogen age with its infinite possibilities of death and destruction but, more important, it provides a specific example of the American way of life.

(Presentation of slides, the subject matter of which was the production facilities of Charles Pfizer.)

* * *

Dr. W. A. LaLande, Jr.: Mr. Gutman, fellow speakers, ladies and gentlemen: I should like to make one little remark before I begin my technical talk. Mr. Gutman said that Charles Pfizer was a progressive company and had a projector for its slides which its representative could take with him. Pennsylvania Salt is also a progressive company, and we have such a projector, too.

The word fluorine, like atom and antibiotic and uranium, has become, beginning with the end of the late war, more common. People are beginning to use it. The newspapers and popular magazines, and even the radio, have been referring to this substance fluorine with awe and wonder.

The technical and scientific literature in the last six years contains more references to fluorine and its compounds than does all the literature in all preceding years. This indicates, of course, the enormous advances being made in the chemistry of fluorine and in its technology.

What is the reason for the interest in fluorine? Is it something new? Is it a product of wartime research? Is it a fantastic discovery made coincidentally with the dis-

covery of the way to atomic energy? Actually, fluorine and its compounds—at least some of its compounds—are not new. They are quite old, and they have, again—some of them—been used for a long time in industry.

Fluorine is a chemical element, as you probably all know, and, in the form of fluorspar, cryolite, and several other minerals, is rather widely distributed in nature. It is a surprising fact, and not many people realize it, but, in the order of relative abundancies, fluorine stands with carbon, and nitrogen, and chlorine. I should like to have a little more time to enlarge on that, because, when you realize that fluorine is probably as abundant in nature as common things like carbon, nitrogen, and chlorine, I think you would have a hard time believing it at first. Nevertheless I think we could document that statement very easily.

Fluorine itself—I mean the free element—was first isolated by Henri Moissan, the French chemist, in the 1180's, and he performed a lot of tricks with it; he gave the material a rather bad reputation, and I will have more to say about that in just a moment. But the reputation acquired prevented some chemists from working with the material. They were afraid of it, and perhaps they had reason to be, although those reasons do not exist any more.

Fluorine is more reactive than any other substance known. It reacts energetically with almost anything with which it comes into contact and produces fluorine compounds which are sometimes as active as the original fluorine and in other cases quite harmless.

Things like gasoline and water, and asbestos, and many metals simply burn up in fluorine, a rather surprising phenomenon. That explains, or illustrates, rather, the intense activity of the material.

Fluorine forms an acid which is rather better known than the element itself, hydrofluoric acid. I think the characteristics that we all know about in hydrofluoric acid include the fact that it dissolves glass.

Because of these characteristics of fluorine and some of its compounds, as I have already said, chemists did not want to work with the material. It is necessary, in order to develop my theme, to point out to you again that some fluorine compounds have been used for a long time. For example, before World War II, cryolite, which chemically is sodium fluoroaluminate and is mined only in Greenland, was used and still is, for that matter, in the manufacture of aluminum. It is also used as an insecticide and in ceramics.

Hydrofluoric acid has been used for a long time, as I have already indicated, in the etching of glass, for making other chemicals, and, beginning in 1930, for the manufacture of a very important group of substances known as the Freons. For some reason, many people overlook the fact that the Freons are fluorine-containing compounds. They were introduced, as you know, by duPont and are important refrigerants.

I should like to emphasize the Freons a little because of their chemical constitution. They are organic compounds containing fluorine, and their method of manufacture links the old-fashioned manufacture of fluorine with the new method of manufacturing fluorine.

Another fluorine compound that has been around a long time and has been extensively used in enormous quantities is the mineral fluorspar. All other fluorine compounds are derived from fluorspar, and the mineral itself, in somewhat purified form, is used in enormous quantities in the steel industry as a flux.

A few other fluorine compounds have been used for a long time, sodium fluoride, and a few others, as insecticides, in making other chemicals, in ceramics, and so on. I could add more, but I think I have illustrated my point.

I should also like to emphasize that the ones that have been used, thus far, are those that are available without much processing and are readily obtainable and rather easy to use.

Although the patent literature, going way back now through the years, shows that several industrial groups were thinking about fluorine and doing things with it, really not much happened, and it must be admitted that the chemistry and technology of fluorine and its compounds was not in a flourishing state when the war started in 1939.

As soon as the war started, some of the fluorine compounds that were already known began to be used in much larger amounts. For example, our friend, hydrofluoric acid, to which I have referred already, was not only employed in larger amounts for its customary purposes but also developed a very important application: namely, the production of aviation grade gasoline by the catalytic allocation process. Then another curious thing happened. Fluorine itself—this terrible gas which only a few chemists had handled, and then only on a laboratory scale as a scientific curiosity—was actually required, was actually produced in fairly large quantities, and we learned a great deal about it.

As you probably have read, the fluorine was required for the manufacture of uranium hexafluoride, which, of

course, was used in the preparation of Uranium 234, which, again, was used in the atomic bomb project.

The atomic energy program also required another material with peculiar properties. A liquid was needed that was very resistant to chemical attack, including the attack by fluorine, and also resistant to fairly high temperatures. Literally hundreds of compounds were tried, but the only ones found useful were ones containing fluorine, and those materials came to be known as fluorocarbons. The fluorocarbons contained only carbon and fluorine, and I think, since they received so much publicity, and because they are, even now, fairly important compounds and are bound to become more important, I should illustrate precisely what we mean by a fluorocarbon. I think we can do it in this way:

If we went to the service station at the corner and got a gallon of gasoline, the properties of which we are all familiar with, and processed it in a certain way with some fluorine chemicals, we could change it into a colorless liquid which wouldn't look much different from the gasoline we started with. It would have about the same boiling range; its freezing point, which would be very low, wouldn't be much different from that of gasoline. Its vapor pressure wouldn't be too much different.

Well, how would it be different? It would be different in many ways, and the ways I am going to mention are characteristic of fluorocarbons in general. This liquid, which looks like gasoline, if we poured it into a container with gasoline, would sink to the bottom. It would not mix with the gasoline; it would stratify. So we now have a solubility effect which can be very important in chemical compounds. It would also be about twice as heavy as the gasoline we started with, and, more importantly, and very significantly, this liquid, this fluorocarbon that we have made from gasoline, has no value as a fuel at all. In fact, it would be an excellent means of putting out a raging gasoline fire. It does not burn any more.

Also, if we subjected this material to attack by many chemicals, such as nitric acid and sulfuric acid, and a lot of other chemicals, we would find that the fluorocarbon, this material that was once gasoline, would have come through the treatment unscathed. In other words, it is very inert.

Also, if we raised it to a very high temperature, we would find that it would not be decomposed.

Now, all these properties are very important, and I am going to refer to them again and again in the remaining minutes.

So fluorine compounds were necessary in order to prepare the fluorocarbons I have just described. These materials are called metallic polyfluorides. They are made by taking the necessary metallic compound, usually cobalt, cobalt carbonate, cobalt oxide, treating it with an excess of fluorine, and obtaining a new material which is called cobalt trifluoride.

When the organic compound, for example, gasoline, is contacted with the cobalt trifluoride under specified conditions, it gives up part of its fluorine; it enters the organic material we are treating, and we get these fluorocarbons which were needed for the use I have mentioned just a little while ago.

The Germans were also at work on fluoro compounds before the war and during the war. One of the choice items they developed during the war and made, I believe in rather

substantial quantities, was a compound of chlorine and fluorine called chlorine trifluoride. They intended to use it as an incendiary, and, believe me, it is admirably adapted for that purpose. If we were to bring a tankful of chlorine trifluoride in here and open the valve—it is a low-boiling liquid—the chlorine trifluoride would shoot out; anything it contacted would go up in flames, and, to add to the confusion, there would be some very noxious gases containing fluorine forms; therefore, if it had been used, it would have been a really beautiful weapon.

The Germans were also working, at the same time, on a material that was very useful—an insecticide which they called Gix. Now, Gix is very closely related chemically to DDT, except that it contains less chlorine than DDT, fluorine taking the place of the chlorine which has been removed, as it were.

This is a very useful insecticide. The Germans used it much more than we did, but at the present time in the United States it is being used more and more, and I think we will continue to hear more and more about it.

Another fluorine compound quite different from anything that had been made before, or utilized before, was used in this country near the end of the war. It was the material 1080, which, chemically, is sodium monofluoroacetate. This material is exceptionally poisonous to rodents and to some other animals and is serving a very useful purpose. It is pretty dangerous and I believe is still under restriction.

Two other fluoro compounds came into prominence during the war which must be mentioned here. One of them—we will treat them both together to save some time—is Teflon, and the other Kel-F. Kel-F is a product of Kellogg & Company, and Teflon is made by duPont. Both these materials are plastics, and they are rather remarkable plastics, because they are singularly inert to chemical attack. I have said that many, many times. I am saying it again for another fluoro compound, because it is of outstanding importance in connection with fluorine technology. So these two plastics are both resistant to all kinds of chemical attack. They are also quite stable at high temperatures. They simply leave all other plastics behind in these two respects.

You can easily imagine, without my going into too much detail, that products like these have many applications, and both these materials are being used more and more. Literally, they have been godsend to the chemical industry, and we can expect that reaction equipment lining, pipes, and all sorts of apparatus that must stand very good service will find use for Teflon and Kel-F.

I have told you something about the use of fluorine chemicals before the war. I have tried to show you that during the war some entirely new type of fluorine compounds were developed. Of course, many of those are still under development. The enormous amount of work that was done on fluorine and its compounds during the war had another very important effect, besides the discovery of new compounds and new uses for fluorine compounds. It showed industry that these materials, many of which were formerly considered too hazardous for the ordinary chemist to bother about, could be safely and easily handled, and, whenever that happens, you will find real progress in the chemical industry. But the research work done not only indicated

that these materials could be handled by the ordinary chemist and the ordinary plant operator but also uncovered many of the really remarkable properties of fluorine and its compounds. Some of these I have already indicated, and I am going to summarize them in just a moment.

The research showed clearly that fluorine compounds themselves were useful in many ways and had many remarkable properties, but it also showed that, by making fluorine part of known compounds; by putting fluorine into other known materials, common materials, by chemical means; we could produce changes in properties which were very desirable. These properties were quickly recognized by industry, and many laboratories throughout the country today are hard at work on the problem.

I should mention that, since the end of the war, there has been an important development in fluorocarbon chemistry, and again it has received quite a bit of publicity.

The fluorocarbons, as I have already indicated, were made by making another fluorine compound first with fluorine and then contacting this product with the organic material to make it fluorocarbon.

J. H. Simmons discovered about ten years ago that, if organic compounds were dissolved in or suspended in anhydrous hydrofluoric acid and then electrolyzed and a current passed through, the fluorine at the moment of its formation reacted with the organic compound very smoothly and formed our new friends: the fluorocarbons. This is a rather neat way of making materials of this type; the compounds that have been worked on so far have been gases and liquids, but we can expect more developments along these lines.

Earlier in my talk I emphasized the violent character of fluorine, and then I assured you that the work done during the war led to the understanding of the material, how to handle it, how to make its processing easy.

Today, fluorine itself, this terrible gas, can be purchased in cylinders as compressed gas, cylinders that look just like oxygen or carbon dioxide cylinders; this enables the compressed fluorine gas to be brought into any laboratory and used for study of its properties.

Fluorine trifluoride, the gas that the Germans were considering using as an incendiary, can also be bought as a compressed gas. Both these materials are marketed by Pennsylvania Salt Manufacturing Company. The same company also manufactures and sells another interesting fluorine product, one made simply by reacting sulfur with fluorine. Here we have an example of the not-too-reactive sulfur combining with this very reactive fluorine to produce a gas that is almost inert. Nevertheless, it has interesting properties physically, and the material is of very great interest to the electrical industries as a dielectric medium. I think that we will be hearing more and more about sulfur hexafluoride in the future.

Other fluorine products that have appeared since the end of the war are Genatrons. These materials are used as refrigerants. Their organic compounds contain fluorine.

Now, I want to emphasize, again, that fluorine is important in technology because, as a chemical element, it is unique. We know of nothing else that has the same properties as fluorine. We know of nothing else that confers on

other materials into which it enters by chemical combination these properties.

What are these properties that are so important, and why are they important? I am sorry that I do not have enough time to explain all this, but I think I can indicate some of the things that make fluorine so interesting. I have already mentioned the effect of fluorine on the solubility of compounds. It is sometimes important to have a material soluble or insoluble. Obviously, if we want a gasket or some similar object to resist chemical attack, or we want to use it in a service with organic liquids, we certainly do not want it to dissolve in these liquids.

We are discovering ways of making such materials, Kel-F and Teflon, where the solubility of the material can be regulated by the introduction of fluorine from very soluble to insoluble.

The introduction of a great deal of fluorine into a compound—that is, raising the content of fluorine in the compound—usually makes the material less reactive. It makes it less soluble also, but it could be less soluble and still reactive. However, under the right conditions, the fluorine makes the material less reactive, and this, of course, is important, again, wherever you have a service that involves attack by other chemicals.

Next, the toxicity of fluorine compounds is most interesting and is a subject in itself. Not too much has been published about the toxicity of fluorine compounds, although very recently a two-volume work on uranium fluoride and HF, and other fluorine compounds has appeared.

Some of the fluorine compounds, especially those containing very large amounts of fluorine, are quite nontoxic. They can be taken into the animal organism and nothing happens. They are excreted without change. The body does not seem to be able to metabolize. Take the gas, sulfur hexafluoride. Animals and humans can live in very high concentrations of that. In fact, we can make up oxygen sulfur hexafluoride mixtures in which the sulfur hexafluoride replaces the nitrogen of the air, and animals can live in it. The gas is practically as inert as nitrogen itself.

However, it is possible—and this is being done—to tailor molecules so that the fluorine introduced is fairly active, and, when it is taken into an organism—I am not speaking of human organisms now, but the pests, the insects, and the fungi, and so forth—we get very desirable effects. The fluorine compound gives up its fluorine inside the organism and interferes with the metabolism, and death results.

Now, some fluorine compounds in the human organism, of course, would be dangerous, because the human organism would break off the fluorine in a soluble form, and, since we are calcium animals, as well as animals containing a lot of other things, damage would occur, and the human organism would die.

On the other hand, it is possible to tailor molecules that are not poisonous at all. We can expect interesting developments along both paths: of compounds as pesticides and of a few pharmaceutical preparations.

Now, it is not possible, although the word does appear in the title of my talk, to talk too much about the "future" of fluorine chemicals. The reason, I think, is perfectly obvious. I am not going to tell you very much of what I am doing, and, if I know what the other fellow is doing, why,

being a gentleman, of course, as well as a chemist, I don't talk too much about his work either.

These properties that I have tried to emphasize can be conferred on other chemical compounds by introducing into those compounds fluorine by methods that we know, by methods we are learning, and thus we can make properties to order, as it were. That is being done, but, when you realize the number of chemical compounds that are known, then you realize the amount of effort that must go into studying how fluorine behaves in many of these combinations, and you realize we still have a great deal of work to do.

I tried to show you that a great deal has been done already, that fluorine chemistry is becoming a big business and certainly will become larger.

In conclusion, then, and emphasizing some of these things, fluorine chemicals are developing in a pattern that is familiar and encouraging to the technologist and to the businessman. We have in hand an element with exceptional properties. No other element shares its properties. We have it available in at least two cheap and plentiful raw materials. Although we did not learn about its properties very quickly, under the stimulus of the late war we got to work and found out a lot of properties, and we are making materials and have made materials that are being used and will continue to be used.

Now, don't consider the fluorine developments to be in the idea stage. Of course, we have plenty of ideas, ideas for hundreds of man-hours, but many fluorine compounds which you haven't heard about are right now entombed in bottles in the research laboratories. Others have left the research laboratories and are in the pilot plants getting ready for production, and still others, of course, as you probably must have seen in the advertisements of the technical journals, are already in the hands of the application research men, and the market development men, whose techniques are doing so much to reduce that sometimes embarrassingly long interval between research work and sales, profits.

So, because of our enthusiasm about the properties of fluorine, because we believe we know what to do with it, we are very sure you are going to see it for the rest of time to come, as far as we are concerned, a long string of chemicals containing fluorine which will find application as plastics, pesticides—which I have mentioned—selective solvents, synthetic textiles, heat exchange media, hydraulic fluids, fluxes with special processes, refractories with interesting properties, enamels, and a long list of other compounds too numerous to mention.

Thank you very much. (*Applause*)

* * *

Chairman Gutman: Francis, will you step up now and talk to us?

Mr. Francis S. Williams: Ladies and gentlemen: My subject, "Some Investment Aspects of the Chemical Industry," is a broad one, and I may not be able to do it justice in the time available. I will make a few comments about those characteristics that distinguish the chemical industry from all others, and on some of the more important trends.

The year 1949 was, on the whole, a very good one for

most chemical companies. Since the turn of the year, the volume has continued at a very high level. In most instances, profit margins have been well maintained or have substantially improved, owing partly to the high level of operations, and partly to substantially increased efficiencies.

Since the end of World War II, the sales of chemical companies, on the average, have increased about 60%, while earnings have advanced nearly 170%. This record has been achieved without the benefit of substantial price increases.

The duPont Company, Allied Chemical and Dye, and Union Carbide have all increased their selling prices, on the average, considerably less than 25% compared with the prewar year 1939.

During this period, the cost of their raw materials has more than doubled. Average hourly wages have nearly doubled, and the Bureau of Labor Wholesale Price Index has increased approximately 114%. This policy of the chemical industry in maintaining the line on price is a very important matter for investors to consider. In normal times, chemical companies place a great deal of emphasis on cost reductions. A portion of the cost reduction generally is passed along to customers in the form of lower prices. The lower prices frequently open up new markets for chemicals and contribute to the growth of the industry.

The normal downward trend in prices of chemical products has been interrupted by the inflation. Nevertheless, the spread between the prices of chemicals and those of nearly all other products has greatly widened, thus strengthening the position of chemicals wherever they come into competition with other materials. The investor in chemical stocks today has real measure of protection in the prevailing low price structure of chemical products.

The chemical and chemical process industries have spent several billion dollars on plant expansion since the war. This is not yet fully reflected in sales and earnings. Construction on a number of important projects remains to be completed, and plants that started operating recently have not yet reached their maximum efficiencies. Therefore, we expect that sales and earnings, in the future, will pick up further substantial benefits from the plant expansions.

Capital expenditures in the future are likely to be on a lower level than during the past four years. This should relieve the strain on working capital and permit the payment of a larger proportion of earnings in the form of dividends. It should be recognized, however, that the chemical industry will never entirely complete its building program. New projects continually are being approved in order to provide the facilities for the manufacture of new chemicals that are being developed in the research laboratories.

I cannot overemphasize the fact that the basic characteristic of the industry is one of change. Chemists and engineers are constantly striving to improve the quality of products, to design more efficient processes, to reduce costs, and to develop new products. Scientists, working with new and greatly improved research instruments and tools, such as X-ray diffraction and radioactive isotopes, have uncovered many new facts regarding the fundamental composition of matter.

Each new discovery frequently supplies the missing link of knowledge on an unrelated research project, thus leading to a chain of new developments. The results of re-

search are cumulative. The new knowledge is being applied on an ever-increasing scale. There never was a time when the opportunities for commercial development, based on the advance of scientific knowledge, were greater than today.

I should like to give you just a few examples that are typical of chemical progress in many fields.

Polyethylene today is the most rapidly growing of all plastic materials. Introduced just a few years ago, it will soon be produced by duPont and Union Carbide at an annual rate approximating 55 million pounds. Polyethylene is polymerized ethylene derived from refinery gases and from natural gas. Since it is made directly from abundant, inexpensive raw materials, polyethylene in large-scale production should be a low-cost plastic material.

There are many reasons for the growing popularity of polyethylene. It appeals to a wide variety of manufacturers, not only because of its chemical and physical properties, but also because it lends itself to several rapid and economical methods of fabrication, particularly extrusions. The largest market today for extruded polyethylene is in electrical insulation, for communication cable, for power and television cable. These uses take full advantage of polyethylene's unmatched dielectric properties which are maintained over a wide range in service conditions.

Polyethylene also has striking advantages in many packaging applications. It is tough and resistant to moisture, retains its flexibility over a wide range in temperatures, is warm and soft to the touch and resistant to most solvents and corrosive chemicals.

The extrusion of uniform and transparent films has speeded the application of polyethylene to the packaging of fresh fruits and vegetables, frozen foods, and chemicals. It is being used as an interliner in the manufacture of multi-walled paper bags, in order to increase their strength and moisture resistance. It is being used to an increasing extent as liners for steel drums and fiber containers for the shipment in bulk of corrosive chemicals and granulated or powdered materials. There are many indications that Celophane will find a stiff rival in the years to come.

Hercules Powder Company's potent new insecticide, Toxaphene, made some impressive gains last year. It now ranks with DDT and benzene hexachloride as one of the most effective and useful of all insect toxicants. Toxaphene is chlorinated camphene with the chlorine content approaching 69%. The camphene is derived from turpentine, which is steam-distilled from pine stumps at the Brunswick, Ga., Naval Plant of the Hercules Powder Company.

Toxaphene has demonstrated its effectiveness in control of the boll weevil and other major cotton pests, and is recommended for this purpose by all the leading cotton-growing states. It is recommended by the U. S. Department of Agriculture for the control of grasshoppers. It has been found effective on the army worm, the saltmarsh caterpillar, ticks, and cattle lice. The use of Toxaphene in sprays to control ticks on cattle recently was approved by the U. S. Department of Agriculture. It would be quite difficult to overemphasize the significance of this new use for Toxaphene, particularly to the people who live in Central and South American countries.

Latin American cattle long have been afflicted by two

devastating insects: the tick and the burr. The tick is a carrier of an organism that causes cattle fever. Both the tick and the burr feed on blood and weaken the cattle to such an extent that their ability to convert vegetable matter into meat and dairy products is drastically impaired.

The Standard Oil Company of New Jersey is supplying a product trade-named Esso Livestock Insecticide A for experimental control of the tick and the burr on beef cattle in Brazil. This product contains Toxaphene in a petroleum solvent. The Brazilian experiments have been so strikingly successful that the widest possible distribution of Esso Livestock Insecticide is planned for every country of Central and South America. Ultimately, this should result in a significant increase in productivity of the Latin American cattle industry.

In order to keep up with the demand, Hercules has already had to expand its Toxaphene plant several times. The last expansion, which was completed recently, will make it possible for Hercules to produce 50% more Toxaphene in 1950 than in 1949.

The Solvay Division of Allied Chemical and Dye Corporation has developed a new and distinctly different synthetic organic detergent having a combination of properties not found in any other detergent. This product is being sold principally for industrial consumption under the trade name Nytron. Nytron's most outstanding property is its exceptional detergency. Its cleaning action is gentle enough for laundering fine woolens and sheer fabrics, and yet its soil removal power is so great that it will clean heavily greased overalls and will even aid in pickling steel.

Nytron works particularly well in very hard waters. It is stable in acid and alkaline solutions, a property that has led to its adoption for certain industrial processes where soap and other detergents cannot be used.

Nytron is making its way in an exceedingly competitive field. It is of wide interest to virtually every major industry. It is low in cost and effective in extremely small concentrations, and it provides better cleaning at lower cost. Other uses are being developed for Nytron: in the dewatering of pulp in paper mill operations, where Nytron's ability to break the surface tension of water speeds the separation of water from the pulp; in fire fighting, where Nytron increases the power of water to wet things, and thereby enhances its fire quenching properties; in the mixing of concrete, where it chases out the air bubbles and results in a denser, stronger concrete.

Chemically, Nytron is a complex alkyl sodium sulfate derived from petroleum, nitrocel chloride, and sodium sulfide. Nitrocel chloride is produced as a by-product of Solvay's unique process for the manufacture of chlorine without caustic soda.

As you all know, most of the chlorine is produced by electrolytic decomposition of salt, resulting in an almost equal tonnage of both chlorine and caustic soda. As the demand for chlorine continues to expand at a rate far greater than for caustic soda, the Solvay unique process, in all likelihood, will be substantially expanded, resulting in increasing quantities of nitrocel chloride for the manufacture of Nytron and for many other uses which are now in the course of development.

These are but a few typical examples of chemical progress in many fields. They serve to illustrate the creative growth characteristics of the industry.

I have probably talked altogether too much, and I hope that you will feel perfectly free to ask any question that you like. Thank you. (*Applause*)

* * *

Chairman Gutman: Well, officially, we are supposed to begin getting out of here, but we have about ten minutes leeway, so let's have a few questions.

Question: I should like to ask Mr. McKeen about Neomycin. Has any progress been made there?

Mr. McKeen: No substantial progress has been made. The original Neomycin has been separated into two crystalline fractions, one of which is somewhat less toxic than the other. Several cures have been effected with it and it may eventually find specialized usage; but, to date, there is no large-scale production of it, although several companies are contemplating it. It is not out of the running yet.

Question: I should like to ask if Aureomycin has succeeded in attaining a very useful position in the antibiotic market and one that is apt to continue until something comes along that does not have the one or two properties that make it slightly vulnerable, such as the potential nausea when taken early in the morning on an empty stomach.

Mr. McKeen: They seem to be gradually overcoming that. Several organisms are building resistance to it, but it has attained a very high position in the antibiotic field, and its sales are extremely high.

Question: Could you give any order of comparison in the sales between Aureomycin and Chloromycetin?

Mr. McKeen: Wally Werble, in his food, drug, and cosmetic reports, stated that the combined market for both of those is of the order of \$25 to \$75 million a year. That is a wide range, but, of that amount, I would say it is probably two-thirds Aureomycin and one-third Chloromycetin.

Question: In other words, Aureomycin is selling twice as much.

Mr. McKeen: I would roughly estimate that.

Question: I should like to ask Dr. LaLande what companies are most active and prominent in fluorine chemistry besides Pennsylvania Salt.

Dr. LaLande: Pennsylvania Salt Manufacturing Company, duPont, Minnesota Mining and Manufacturing, in their rather narrow field, Hooker Electro-Chemical. I think I have covered the important ones.

Question: Is Terramycin going to be competitive with Aureomycin and Chloromycetin?

Mr. McKeen: Pricewise, or usewise? Let's take both of them. Pricewise, we believe that Terramycin will be competitive. It may be slightly higher, or it may be the same price. It has not been established yet. At the present time, the cost of production is quite expensive. We have very extensive research facilities devoted to bringing that down.

Insofar as usage is concerned, the clinical program so far indicates that it will be of the same order, or perhaps slightly better, in its activity, than Aureomycin. As you know, Chloromycetin has certain specific uses that Aureomycin is not suitable for, such as in typhoid, but I would

tend to list Terramycin and Aureomycin as on a plane, with Chloromycetin closely following.

Question: When do you expect, with favorable conditions, to be able to market Terramycin?

Mr. McKeen: Well, we have an application now before the Food and Drug Administration for its release, and we have over 200 clinical cases presented to that group. It cannot be sold until they approve, first, the fact that it is safe for public usage, and, second, the diseases for which it shall be used. It will take many months to ferret out its use in a wide variety of diseases.

Initially, it probably will be released for some of the standard large-scale diseases, such as venereal diseases, pneumonia of various types, influenza, and virus pneumonia. I would roughly say that would be a month or two months from now.

Question: Mr. McKeen, is the domestic consumption of streptomycin growing as fast as foreign consumption?

Mr. McKeen: The foreign consumption is very much greater than the domestic consumption. Domestic consumption seems to have leveled off, its principal use being in tuberculosis, where it is used in practically every case where it can be helpful, and in urinary tract infections. The foreign demand is probably four or five times that of the domestic demand.

Question: Mr. McKeen, everybody grants Pfizer's wonderful production ability; will you comment on its selling ability with regard to the new product it is putting out?

Mr. McKeen: Its selling ability cannot today match its productive ability. Frankly, that is one of the problems we are facing today and studying very seriously. We hope to find answers to that as we go along, and we are applying ourselves as well as we possibly can to that problem, but

we must recognize the fact that our selling capacity does not match our ability to produce on a low cost today.

Question: Would Mr. Williams care to comment on the relative importance of these new products that Allied, Hercules, and Union Carbide are putting out and the total picture of those companies earningswise?

Mr. Williams: That is a rather large question. Could you narrow that down just a little?

Question: Take Allied. How important is this Nytron?

Mr. Williams: Nytron is just beginning. It has a long way to go before it will be big enough alone and in itself to influence the sales and earnings greatly. I do not think that alone at any point it would be big enough in the whole Allied picture to be too significant. But that, plus a number of other developments in the picture, should be somewhat helpful.

Hercules—Toxaphene is likely to be of greater importance in the over-all picture than Nytron for Allied. In addition to that, Hercules has a very aggressive research program on an increasing number of new products. Hercules should do well this year and have increased earnings.

Question: Now Union Carbide.

Mr. Williams: Well, Union Carbide has so many new developments under way that it is a little difficult to treat it adequately at this particular point. One of the most notable things that is really coming into production this year in a big way is their tremendous increase in capacity for ethylene glycol via direct oxidation processes, which is a relatively new thing. Carbide has been operating such a process on a small scale for years, but they are the only company that has so far been successful with it, and they are adding this year 250 million pounds.

Chairman Gutman: The meeting has to end now.

SCORE SHEET OF TEN CHEMICAL COMPANIES

(See Report of Sub-committee, page 68)

1948 ANNUAL REPORTS

	<i>Air Reduction</i>	<i>Allied Chemical</i>	<i>American Cyanamid</i>	<i>Dow</i>	<i>Du Pont</i>	<i>Hercules Powder</i>	<i>Mathieson</i>	<i>Monsanto</i>	<i>Union Carbide</i>	<i>Victor Chemical</i>	<i>Total Score</i>
<i>Essential</i>											
Summary of year's operations	no 0	no 0	no 0	yes 5	yes 5	no 0	yes 5	yes 5	yes 5	no 0	25
Full income account* †	yes 5	part.3	yes 5	yes 5	yes 5	yes 5	yes 5	yes 4	yes 5	yes 5	47
Balance sheet*	yes 5	yes 4	yes 5	yes 5	yes 5	yes 5	yes 5	yes 4	yes 5	yes 5	48
Operating review	yes 5	no 0	part.3	yes 5	yes 5	no 0	no 0	part.3	no 0	no 0	21
Subtotal	15	7	13	20	20	10	15	16	15	10	141
<i>Desirable</i>											
Breakdown of sales by divisions	no 0	no 0	no 0	yes 5	no 0	no 0	no 0	no 0	no 0	no 0	5
Breakdown of sales by ind. served	no 0	no 0	no 0	no 0	no 0	no 0	no 0	no 0	no 0	no 0	0
Capital expenditures	yes 5	yes 5	yes 5	no 0	yes 5	yes 5	yes 5	yes 5	yes 5	yes 5	40
Research expenditures	no 0	no 0	yes 5	no 0	no 0	yes 5	no 0	no 0	no 0	yes 5	15
Total wages (incl. benefits)	yes 5	yes 5	no 0	yes 5	yes 5	yes 5	no 0	yes 5	no 0	no 0	30
10-year record‡	yes 5	yes 5	no 0	yes 5	yes 5	yes 5	yes 5	yes 5	yes 5	no 0	25
Foreign business	no 0	no 0	no 0	no 0	yes 5	yes 5	no 0	part.3	no 0	no 0	13
Subtotal	10	10	10	15	20	25	10	18	5	5	128
<i>Useful Information for Analyst</i>											
Index of selling prices	no 0	no 0	no 0	no 0	yes 5	no 0	no 0	yes 5	no 0	no 0	10
Index of raw material costs	no 0	no 0	no 0	no 0	yes 5	no 0	no 0	yes 5	no 0	no 0	10
Index of wages	no 0	no 0	no 0	no 0	yes 5	no 0	yes 5	no 0	no 0	no 0	10
Future plans for cap. expend.	yes 5	no 0	no 0	yes 5	yes 5	yes 5	no 0	no 0	no 0	no 0	20
Total number of employees	yes 5	no 0	yes 5	yes 5	yes 5	yes 5	no 0	no 0	part.3	no 0	28
Summary of products made	yes 5	no 0	yes 5	yes 5	part.3	yes 5	yes 5	yes 5	yes 5	yes 5	43
Description of management	no 0	no 0	no 0	no 0	part.3	no 0	no 0	no 0	no 0	no 0	3
Charts	no 0	no 0	no 0	yes 5	yes 5	no 0	no 0	yes 5	no 0	no 0	15
Subtotal	20	0	10	20	36	20	5	25	8	5	149
Grand Total	45	17	33	55	76	55	30	59	28	20	418

*Current Year and previous year recommended.

†Sales and operating costs must be shown.

‡On comparable basis.

Report of the Subcommittee on the Adequacy of the Annual Reports of the Chemical Industry

Subtitled *The Chemical Analyst Wanders in Wonderland*

I PURPOSE

This committee was given the problem of studying the annual reports of a single industry and preparing an ideal annual report.

II CONDITIONS CALLING FOR SUCH A STUDY

The annual report of a chemical company (any company in fact), offers the analyst his first line of attack in examining the condition of a particular company. The following generalizations, which will not be surprising to analysts, are pertinent.

1. That many reports are incomplete in essential details. That pertinent information about the operating activities is often omitted; and an analyst would be left in a complete state of frustration, if there was no other source of information about the company on which to proceed.

2. There is no uniformity in the setup of the income account or balance sheet.

3. There is considerable failure on the part of corporation officials to recognize the information desired by analysts to understand fully the operations of a company.

4. Pertinent data is so scattered throughout the report that it is difficult to piece it together in a co-ordinated whole.

III SCOPE

This study was confined to the chemical industry because:

1. There were not too many major companies in the chemical industry.

2. While the companies are engaged in different phases of the chemical industry, there is sufficient homogeneity, among them as to create a similarity of problems in the matter of presenting annual reports.

3. Ten leading companies were selected as being a representative sample of the industry.

IV PROCEDURE

From this study, it was determined that the report of E. I. duPont de Nemours came the closest as to what an ideal report should be, though even it was somewhat deficient. Using this report as a model and incorporating certain items that were included in other reports, a list of twenty features that should be included in every report was determined. These twenty items were then broken down into three categories: "Essential," "Desirable," and "Useful Information for Analysts," and are given in the score sheet which appears on page 67.

Following the determination of what should be included in a "model" report, the annual reports of each of the ten companies were scrutinized from the point of view of how well it measured up to the "ideal." The twenty items were arbitrarily assigned equal weights, though it is recognized that some of the factors are much more important than others. The mere mention in the report of any particular item was sufficient, in most cases, to allow full credit; though in a few cases, when the coverage was obviously inadequate, only a partial credit was given.

V RESULTS

It was found that the score of the various companies ranged from 17 (out of a possible 100) for Allied Chemical & Dye to 76 for duPont. The combined score of the ten companies, on the rating used, was 418 out of a total of 1,000 which indicates there is considerable room for improvement in the matter of presentation of desired information.

VI SCORE SHEET SUMMARIZATION

The following schedule summarizes, in the form of a box score, the rating of the combined companies from an analysis of their reports, and clearly shows where the emphasis should be laid in the preparation of future annual reports.

	Combining Rating	Possible	% Attained
Essential	141	200	70.4%
Desirable	128	350	36.5
Useful	149	450	33.1
Total	418	1,000	41.8%

VII COMMENTS ON ESSENTIAL FEATURES

Most of the companies have scored fairly well in their handling of the essential items, though inadequacy is clearly revealed in the treatment of the summary of the year's operations which should be modeled around the one given by duPont, and in the discussion of their operating review of the year. An urgent need is an income account that is uniform for all chemical companies, which would greatly facilitate their analysis on a comparable basis.

VIII COMMENTS ON DESIRABLE FEATURES

The greatest inadequacies in this group appear to be the failure to give a breakdown of sales by divisions, sales by industries served, the volume of foreign business, and total research expenditures. The importance of the knowledge of these items for the analyst should be obvious.

IX COMMENT ON USEFUL ITEMS

It is clearly evident that the handling of the "useful" items in the annual reports of the various chemical companies is quite deficient in most respects. Only a casual study of the accompanying "score sheet" is needed to show where each company has failed to come up to the standards of what should be included in an ideal annual report.

X CONCLUSIONS AND RECOMMENDATIONS

It is obvious from a study of the score sheet that the chemical companies as a whole are deficient in the manner and form of the presentation of their annual reports. The opportunity for improvement is great, and it is recommended that those responsible for the preparation of these reports give serious consideration to the inclusion of each and every one of the twenty features, thought necessary for an ideal report, in their own reports.

The more complete the disclosure of a company's operations, the better the job the analyst can do. In 1948, ten leading chemical companies supplied only 42% of the information that the committee feels necessary for a sound and satisfactory analysis.

XI SCORE SHEET

The score sheet on page 67 is the keystone of this whole study, as it was around this that the analysis of the annual reports was made.

Respectfully submitted
for the subcommittee

H. KELSEA MOORE

THE ANALYSTS JOURNAL

Outlook for the Automobile Industry

THURSDAY AFTERNOON, MARCH 2, 1950

GEORGE M. HANSEN, Keystone Custodian Funds, Boston, presiding.

Chairman Hansen: One of the speakers at the luncheon forum brought out one of our shortcomings in Wall Street, and I must plead the same, though in a little different field. I must plead bias and prejudice in favor of the industry under discussion. In order to give us as good a picture as it is possible of where this field is headed, we have gotten together four men who, I feel sure, are very finely qualified to do the job for us.

Our first speaker is Mr. Stephen M. DuBrule, who is the executive in charge of the business research staff of that small Detroit organization called General Motors. Mr. DuBrule has been doing research work for General Motors since 1927. He has seen some ups and some downs. Now I hope we will find out what he sees from here forward. Mr. DuBrule! (*Applause.*)

* * *

Mr. Stephen M. DuBrule: I shall discuss the current prospects for the automobile market, under the following headings:

1. Progress in filling up the backlog demand.
2. The strength of current demand.
3. The used car market and its relation to new car volume under present conditions.
4. General factors affecting national income and, in turn, automobile sales.

16 MILLION CARS SINCE WAR

The U. S.-Canadian automobile industry has turned out almost 16 million passenger cars since World War II. By the end of 1949 it appeared that all of the necessitous buying and most if not all of the backlog of demand had been satisfied.

The current demand for new cars is being well sustained. There does not appear to be any undue accumulation of inventory, although competition is reappearing in its prewar form through variation in used car allowances made by dealers in order to sell their cars. The dealers for less popular, or in the public mind, overpriced cars will give larger allowances on used cars traded in than dealers in the most popular makes.

With the Chrysler shutdown, production has not been sustained at full capacity. The coal strike will begin to curtail automotive production seriously within a matter of days. Even if it were settled now, there will be some curtailment due to the lag in building up coal stocks again to a point that will sustain maximum steel output.

Therefore, it would appear that passenger car inventories, when the spring selling season begins, may be short, compared to the demand. As a result, the selling season may be more prolonged than otherwise might be expected.

Between the end of the war and the summer of 1949 automotive output was limited by the supply of materials.

That situation changed rapidly in the summer of 1949, and the industry's production increased correspondingly, only to be set back again by the steel strike. This year will be clearly competitive. Subject to the extent that supply is unduly curtailed through strikes as mentioned previously it would be reasonable to expect some seasonal drop in automobile sales from the summer on.

Even with the interferences in production that have occurred so far, however, the industry may still turn out more cars this spring than last year.

New cars have about eleven years of economic life built into them. However, they can be made to last indefinitely with unusual care—as the country learned so well during the war. If each car owner kept his car until it fell apart, like the "one-hoss shay," the industry's total production would be very much lower than it has been. To sustain a high level of production, it is necessary for the industry to improve its product constantly. Then the owners of two- and three-year-old cars, whose incomes place them in the new car market, must be persuaded to trade in their old cars to keep up production. These used cars are then available for purchasers whose incomes do not permit the purchase of a new car. The turnover of used cars from those who purchased them as new cars is thus an important factor in automobile demand.

The price owners get for their used cars as trade-ins influences the willingness to buy new cars. We have traced the average price of used Chevrolets, Fords, and Plymouths through want ads in 18 large cities for twenty-four-month-old models, related to the current price of new cars. In good years before the war, two-year-old cars sold for about 50% of the new car price at the time. This ratio dropped to 45% in the depression of 1938, and rose to 55% by the end of 1939. In 1941 this ratio advanced to over 60% when war threatened and new car production was restricted by the Government. After the war, two-year-old used cars actually sold for 10% more than new cars in 1947 and 1948. After reaching the peak ratio of 110% in the spring of 1948, however, the ratio started a steady drop. By the end of 1949 it was down to 65%. Since that time, however, it has stopped falling and for the first seven weeks of this year shows practically a level trend at about 65%.

The current used car market seems to have stabilized above the prewar relation to new car prices, and the ratio of used car sales to new car sales is still less than prewar.

There are still millions of prewar automobiles which people are "making do." Almost all owners of prewar cars wish for better cars. The realization of their hopes hinges on the willingness of the owners of the 1946 and 1947 models to trade in, at reasonable prices. Even so, it will be a long time before enough postwar cars are traded in to furnish an adequate supply of reasonably good cars to replace the worn-out cars that many people are compelled to drive today.

Barring a general depression that materially slows down all automobile buying, the used car market probably will be strong and active. The ratio of used to new car prices should remain above prewar levels for some time.

There is another important factor bearing on the strength of the automobile market. There are millions more potential car buyers today than there were prewar. Population has increased. The income distribution has shifted toward the farm.

A billion dollars of extra income to residents of New York City would sell very few additional new cars. There is neither the need nor the space for them. The same thing holds true of all other concentrated urban centers.

By contrast, a billion dollars of added income of farm families in the western states could produce \$200 or \$300 million worth of new car purchases. The potential use of automobiles by farm families is far from being fully developed. From the birth of large-scale ownership of the passenger car in the mid-'20's and on into the '30's, the great majority of farm families purchased second, third, and even fourth-hand used cars, many of which had been shipped out of the urban centers. The high prices for farm products, resulting from wartime shortages and Government policies, have changed this situation radically. Even with lower prices, farm income is still higher than urban incomes relative to prewar, and the potential farm market for new cars is much larger, in my opinion, than most persons suspect.

DISTRIBUTION OF INCOME

There is also the question of the distribution of income between the eastern and western states. In the small towns of New England, there is less use for a car and less space in which to drive one than in towns of similar size in the Middle West and on the West Coast.

Budget studies show very clearly that a middle-income family is more likely to have a car in the West than in the East. One effect of the war has been a shift of income to the western part of the United States. This, in addition to a shift in income toward the farm population, contributes to a larger potential market for passenger cars than we may expect, based on the simple consideration of the total income figures.

TRUCK MARKET ON DIFFERENT BASIS

Now, a word about the truck market. The truck market operates on a different basis and is subject to different forces from passenger cars. The cycles are not necessarily the same or of the same magnitude, except when there is a deflationary force at work. The truck market must be analyzed in terms of capacity: that is, light trucks, medium trucks, and heavy trucks. Everyone who follows the published figures realizes that the total truck market, particularly in heavy duty trucks and buses, for 1949 was off from both 1948 and 1947. The wartime backlog of demand for trucks was filled earlier than that for passenger cars. After the record years of 1947 and 1948, in which commercial car sales averaged about 60% above the 1940 level, it was only natural that they should drop. Commercial car sales this year should follow reasonably closely the general level of business conditions.

Total motor vehicle sales are closely related to the general

level of national prosperity. When we examine the history of past depressions in the United States, we find in each case that a period of significant limitation on monetary expansion has preceded decline in business. Before the establishment of the Federal Reserve, the restrictions were not the result of conscious policy on the part of governmental monetary authority but were inherent in the nature of the banking system. The extremely tight money and restriction of bank credit, in advance of the declines in business in 1921 and 1930, are well known. These reflected drastic action taken much too late. You will recall also that in 1936 the Federal budget was seriously unbalanced as a result of the soldiers' bonus and heavy WPA expenditures throughout the period before the election. Subsequently these expenditures dropped while tax yields increased, so that there was a Federal surplus for a short period.

RESTRICTION OF CREDIT EXPANSION

Meanwhile, beginning in 1936, the Federal Reserve adopted a policy of restriction of credit expansion by increasing reserve requirements in August 1936 and again in March and May 1937. The last increase resulted in a doubling of reserve requirements in nine months. If these restrictions had been imposed earlier, they might have been beneficial. Coming when they did, their results were unfortunate. They ushered in one of the most rapid declines in industrial production in our history.

Automobile sales fell 50% in twelve weeks—the most rapid decline ever recorded in the history of the industry. This drop was far out of proportion to the real drop in incomes, thus indicating the importance of psychological attitude in the demand for durable consumer goods.

Again, in 1947-48 the Federal Reserve adopted an anti-inflation program which consisted of increased reserve requirements and what some wag has referred to as the "open-mouth" policy to pressure bankers to curtail credit. This action, together with the large Federal surplus, reduced the cash position of every important segment of the American economy during 1948, with the exception of eleemosynary institutions. Fortunately, the effects of these two forces were balanced by two other developments. The first was the passage by Congress of the 1948 tax reduction bill over the President's veto. The second was the action of the insurance companies in selling their long-term Government bonds and relending the funds in the form of industrial loans and mortgages. These developments had the effect of neutralizing a considerable part of the Federal Reserve's deflationary policy. In order to sustain the bond market, the Federal Reserve was compelled to buy the long-term Government bonds sold by the insurance companies. Had it not been for these two actions, the subsequent decline in 1949 might well have been greater. Thus, the much maligned 80th Congress and equally maligned insurance companies assisted in accomplishing a sound result. It is a striking commentary on the competence of the President's economic advisers that the President, in his economic report as late as January 1949, was still calling for deflationary measures when industrial production and prices had already begun to decline.

The easing of reserve requirements, the relaxation of consumer credit controls, and further Federal support of the real estate mortgage market all aided in reversing the de-

cline in 1949. The threat of the steel strike aided in reversing the trend of inventory liquidation. The strong backlog demand for automobiles also was a factor in easing the force of the decline, since as rapidly as materials became available, because of the decline in buying by other industries, the automobile industry promptly used this available material to increase its production.

OUTLOOK FOR CONTINUED EXPANSION

At present the outlook is for continued monetary expansion. The Federal deficit, seasonally adjusted, probably will continue to increase throughout the spring, accelerated by the veterans' insurance refund. This deficit probably will be financed largely by a further expansion of bank holdings of Governments, with the resulting expansion of the monetary base.

The political policy is to sustain building construction at any cost. Apparently, the Administration is prepared to make the money available by any means and regardless of the effect on the Federal deficit. Thus, barring deflationary measures which might be taken by the Federal Reserve to curb bank financing of the deficit, it would appear that the monetary trend will have a stimulating effect probably throughout the year.

You will note that I have made no quantitative forecast for this year's output of new cars. Needless to say, however, I do not agree with Secretary Sawyer's recent release that automobile sales probably will drop 15 to 20% from 1949. Barring further loss of production due to strikes, the first half of 1950 should be 5 to 10% above 1949. It would require a drop in the second half at the rate of the 1937-38 decline to reduce total 1950 production to 20% below 1949. There does not seem to be any justification for such a dire forecast. The public still wants automobiles in large quantities, and those who cannot afford new cars want to buy better used cars than what they now have. Cars are still a better bargain than most other goods.

In any event, such long-term unqualified forecasts serve no useful purpose. It is usually only by good luck that one can forecast the total output of automobiles in a normal competitive market within 10% a year in advance, because too many factors can intervene before the year is over to change the course of sales. (*Applause.*)

* * *

Chairman Hansen: Thank you. We will reserve the questions for the end of the program.

Our next speaker, whose subject will be the competitive position of the automobile producers, is an alumnus of the same school as a great many of us, to wit, Standard & Poor's Corporation, where he spent some twelve years. I think all of you know that after two years at Dayton Field he joined that firm with the short name, Merrill Lynch, Pierce, Fenner & Beane, and has been with them as their automotive specialist since that time. Mr. Warde! (*Applause.*)

* * *

Mr. Arthur W. Warde: Competition is a word that had academic rather than immediate practical significance to most car producers from the end of World War II until 1949. For a good many months, however, the battle for sales has been growing more severe, and there were a num-

ber of "casualties," in the sense of declining trade positions, during the past year.

The Big Three have yet to get back completely to their prewar peak share of the passenger car business. But they now have picked up most of the drop sustained during the postwar shortage period, and the trend early in 1950 (strike effects ruled out) seems to be continuing in the major companies' favor. Competition, with a capital C, has been coming back more and more in this field and bringing with it numerous changes. The customer can once again choose his favorite make without paying an exorbitant premium. And the lower-priced cars, progressively gaining in percentage of total sales, are reflecting the more normal situation. These are factors that give the big fellows an increasing advantage over the average smaller manufacturer.

A GLANCE AT TRADE POSITIONS

A glance at trade positions before the last war will provide a basis for evaluating recent developments and perhaps will indicate future potentialities also.

After the slump in the early 1930's, the three major organizations gained *as a group* at the expense of the independent builders. General Motors, Ford, and Chrysler obtained 90% or more of the passenger car business in a number of prewar years, compared with their 75% in 1929. It is necessary to stress "as a group" because General Motors came forward to claim Ford's first position of a generation ago, while Chrysler's vast growth—from 9% in 1929 to over 20% subsequently—further altered relative positions within the Big Three classification.

In 1941 GM, Ford, and Chrysler gathered in over 90% of the domestic passenger car volume, measured in units. Of this generous slice of the automobile pie, General Motors' 47.3% was, of course, the biggest by far. It may also be well to note that this was the greatest penetration of the market achieved by any car producer in modern times.

In that last year before the war, somewhat more than 3.7 million new cars were registered in the United States. As a yardstick to bear in mind, let it be recorded that the 1941 unit volume was exceeded by 1.1 million cars, or about 30%, during the past twelve months.

Returning to company comparisons, the four lines of Chrysler cars provided more than 24% of U. S. sales during 1941, one of the best showings in Chrysler's history and above its average *postwar* percentage. Ford, with the Mercury and Lincoln models included, obtained less than 19% of the 1941 market. It needs to be pointed out here that the *Ford* line of cars represented about 85% of the company's total nine years ago. On the other hand, General Motors' Chevrolet and Chrysler's Plymouth models accounted for just about 50% of the latter two corporation's volumes in that same year.

Compared with the relatively small contribution that Ford had from the Mercury and Lincoln cars, the much larger volume of GM and Chrysler in the price classes above the lowest was a vital factor for these two companies in the prewar period—and the same condition prevails today.

Ford has been able to expand the Mercury line's proportion by a moderate degree in late years. But in neither the medium-priced field nor in Lincoln's high-priced sector



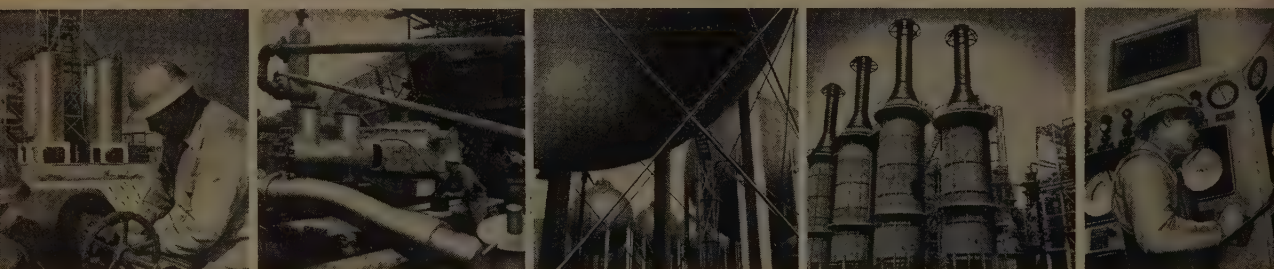
Thousands of Cities Service men and women in their daily work last year searched for and found new sources of oil and gas . . . drilled



barrels of liquid hydrocarbons...brought the Company's oil and gas reserves to the highest point in history . . . completed such facilities



a \$30,000,000 26-inch natural gas pipeline 388 miles long, a \$20,000,000 refinery expansion . . . refined 69,400,000 barrels of crude



feet of natural gas to 633,000 customers in their homes and factories . . . transported by tanker and pipeline 246,000,000 barrels of oil



refined oils . . . these varied activities made it possible for the Directors to report to the stockholder-owners that their Company is in





covered 100,000,000



100 lube oil refinery,



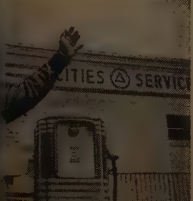
ed 429 billion cubic



3 billion gallons of



tion in its history.*



Behind your gas and oil

— and our Annual Report

—stand the men and women whose team-work provided \$582,000,000 worth of products and services in 1949 for the millions of Cities Service customers.



A man with *imagination* reading the Annual Report of a Corporation sees behind the cold statistics the pulsating human activities of the thousands of men and women without which there would be nothing to report.

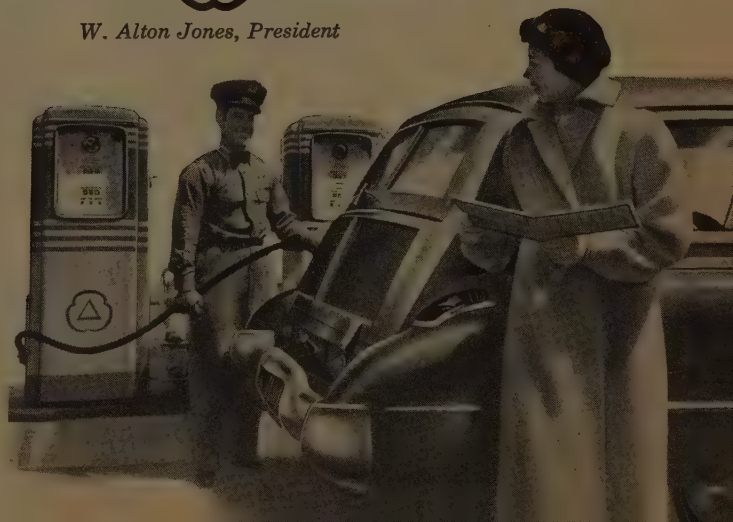
The photographs on this page show a few of these activities, as the people of Cities Service went about their daily tasks last year. They perform the multitude of skilled operations which are necessary before the finished oil and gas products are ready for use on the farm, in the home, on the highway, and in the factory.

As a result of these activities, Cities Service was able to give its 236,000 stockholders the following consolidated financial comparison.

	1949	1948
Gross operating income	\$582,560,721	\$563,657,035
Net income	55,057,822	65,777,039
Cash and Government Securities	160,189,903	144,368,967
Net Current Assets	180,542,106	161,867,520

CITIES SERVICE

W. Alton Jones, President



*All figures are from the Cities Service 40th Annual Report, which is available on request. Write 70 Pine Street, New York 5, N. Y.

All photos are of Cities Service operations. By Fritz Henle, 1949.

NEW PASSENGER CAR SALES—UNITED STATES
Per Cent of Total Market

	4th Quarter 1949	1949	1948	1947	1946	1941	1935	1929
				(Full Years)				
Chevrolet	20.8%	21.3%	20.3%	20.2%	18.2%	23.6%	23.9%	20.1%
Ford	18.4	16.7	13.9	16.8	18.0	16.1	30.1	33.6
Plymouth	11.5	10.9	10.0	9.9	11.6	12.1	14.0	2.2
LITTLE THREE	50.7	48.9	44.2	46.9	47.8	51.8	68.0	55.9
G. M. (Excl. Chevrolet)	20.4	21.6	20.3	21.7	19.6	23.7	14.5	12.6
Ford Motor (Excl. Ford Line)	5.2	4.6	4.9	4.3	4.0	2.7	0.1	0.2
Chrysler (Excl. Plymouth)	11.3	10.5	11.5	11.9	14.1	12.1	8.9	6.7
SUB-TOTAL	36.9	36.7	36.7	37.9	37.7	38.5	23.5	19.5
G. M. (All Lines)	41.2	42.9	40.6	41.9	37.8	47.3	38.4	32.7
Ford Motor (All Lines)	23.6	21.3	18.8	21.1	22.0	18.8	30.2	33.8
Chrysler (All Lines)	22.8	21.4	21.5	21.8	25.7	24.2	22.9	8.9
BIG THREE	87.6	85.6	80.9	84.8	85.5	90.3	91.5	75.4
Hudson	2.1	2.9	3.1	2.6	4.0	1.9	2.8	6.5
Kaiser-Frazer	0.9	1.5	4.8	3.4	0.3	-	-	-
Nash	2.6	2.8	3.0	3.3	4.7	2.1	1.3	2.7
Packard	1.7	2.0	2.2	1.5	2.0	1.9	1.3	1.2
Studebaker	4.3	4.1	4.1	3.2	3.2	3.1	1.4	2.1
Willys-Overland	0.5	0.6	0.6	0.7	0.1	0.6	0.4	5.2
All Others	0.3	0.5	1.3	0.5	0.2	0.1	1.3	6.9
INDEPENDENTS	12.4	14.4	19.1	15.2	14.5	9.7	8.5	24.6

Total Number of Cars Sold (1,000's)	1,290	4,838	3,491	3,167	1,815	3,731	2,744	3,880
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Based on R. L. Polk & Co. New Car Registrations.

does the Ford Motor Company closely approach the other major companies' volume. Thus, GM makes accounted for *four* of the first seven places in the sales ranking during 1949. Chrysler had *two* of the leading seven lines. (Incidentally, Studebaker was in eighth place last year, Mercury was ninth, and Hudson was in number ten position, just nosing out Nash.) From the standpoint of diversification of sales by products and price classes, the other members of the Big Three then remain definitely better situated than Ford.

And now a look at competitive changes in the recent past. Last year the Big Three took 85.6% of the entire domestic market. This was almost 5 percentage points better than their 1948 share of 81%, when a number of the independents were still cashing in on the sellers' market. Ford's major model change-over, involving a curtailment of output for quite a few weeks early in 1948, also temporarily distorted the division of the business two years ago. (From over 21% in 1947, for example, Ford dropped to less than 19% in 1948.)

General Motors made a sharp improvement during the past year, when it rose to about 43% versus 40.6% for 1948. Chrysler remained at about the same relative level in each of the last two years—close to 21½% of the field. Ford increased to 21.3% in 1949, and this gain was about the size of General Motors'.

When 1949 records are broken down by *quarterly* results, the shift in favor of the Big Three takes on additional importance. Thus, the March and June quarters each saw a trifle less than 84% of the business going to the GM, Chrysler, Ford group. This was followed by a rise to more than 86½% during the third quarter, and the final quarter ratio was nearly 88%. (Although the standing of individ-

ual makes was affected late in the year by model change-overs, this is not believed to have been a major factor in the total Big Three gain.)

UNEVEN EXPERIENCE FOR SMALLER COMPANIES

An examination of the smaller producers records in detail sheds further light on the different competitive conditions recently at work. A newcomer—Kaiser-Frazer—had the largest single share of business among the independents during 1948. With 4¾% of the industry's volume in that year, K-F was a prime factor in the 19% share taken by all the non-Big Three companies. This was the best showing percentagewise for the smaller car producers in practically two decades.

Studebaker, the ranking independent during the past year, was able to show a record 4.1% of total sales back in 1948. For comparison, the company's 1941 portion had been 3.1%. Studebaker had already broadened its market by the time of Pearl Harbor; in the mid-1930's and in 1929 this company averaged only about 2% of all U. S. sales. During 1948 other independents like Hudson, Nash, and Packard also had raised their relative sales position, compared with that of 1941.

WHERE HAVE THE BIG COMPANIES' GAINS COME FROM PRIMARILY?

Kaiser-Frazer again figures prominently on this side of the question. During the biggest sales year ever rolled up by the industry, K-F's new car registrations in 1949 *dropped* by more than one half. Its share of the total market was only 1½%, so that, from first place among the passenger car independents a year earlier, K-F slipped to fifth position in 1949.

Studebaker was *not* one of the losers in trade position

last year, maintaining its proportion of better than 4½ for the second year in a row. This company was the single exception among the independents to declining shares of the market in the twelve months recently ended. It may be desirable to point out that, in this discussion of *relative* positions, the increased *actual* volumes achieved in 1949 by most independents may not have been accorded sufficient emphasis. For the record, Hudson, Nash, and Packard all had new car registration totals last year that were better in one degree or another than their 1948 volumes. Willys-Overland's car sales also were up a little, but this manufacturer's commercial vehicles, of course, continued as the principal source of business.

LOWER-PRICED CARS REGAINING TRADE POSITION

One phase of the car market has not fully returned to the prewar average. The Chevrolet-Ford-Plymouth share of total sales recovered to 49½ in the past year compared with only about 44% in 1948. This still leaves the "Little Three" proportion well below their abnormally high ratio of two thirds of the business, as it was divided in the mid-1930's. However, it is quite significant that they secured over 50% of unit car sales in the final quarter of 1949, which was not much below the 52½ obtained by the three leading makes in the year 1941.

Among recent developments pointing up the tighter competitive situation are the price cuts this winter—averaging \$100 or so per car at retail—of Studebaker and Hudson. Moreover, several producers made sizable reductions in certain models at the start of the 1950 season. Lower prices for automatic transmissions are another sign of the times. Last week's "token" reductions by GM, although only \$10 to \$40 per car, are a step in the same direction (even though these reductions were caused by wage adjustments).

In line with the shift toward the moderate-priced cars, Nash is soon to introduce a new and smaller car expected to be more or less competitive with the Little Three. Kaiser-Frazer has been preparing its own small job to sell "in the low-price field."

Their product representation across the board and especially their dominance in the lower-priced field are expected to maintain the big companies in a superior competitive position during the more difficult selling period now at hand. With a tremendous superiority of financial resources and plants dispersed to advantage in respect to both manufacturing and marketing activities, they are in a basically strong position in an industry vitally dependent on large-scale operations. Sales volume several times as great as that of the biggest of the independents should provide—in all but the most abnormal times—unit economies for the major companies that should be reflected in lower selling prices and/or better profit margins than are usually possible for the smaller builders. And in the drive for business in 1950 their large, aggressive dealer organizations can also be marked up as another plus factor for the Big Three. (Although the commercial vehicle question is being handled as a separate subject today, it may be suggested here that GM, Ford, and Chrysler also derive advantages in the passenger car field from their huge volume of truck business.)

However, the independents are not going to accept the situation passively. Companies like Nash, Studebaker, Pack-

ard now have working capital balances (after allowing for any debt) on the order of some \$40 or \$50 million. Since these resources are after the investment of tens of millions of dollars in postwar plant and product improvements, it is plain that their financial sinews are much tougher than in the 1930's.

Even though the figures for the independent car makers are dwarfed by comparison with the financial strength of the Big Three, the working capital increases ranging from around 150% to several hundred per cent give the old-line independents far more to work with than was true ten or fifteen years ago. They have also effected some improvement in marketing organizations, and, with other changes, this should permit a more aggressive approach than was feasible in former years.

1950 A MORE NORMAL YEAR

But the chips are now down, and 1950 should prove a more normal year competitively than we have seen since prewar days. General Motors, with three different automatic transmissions of its own in production, has this additional sales weapon in its already formidable arsenal. Early returns seem to point to a further expansion in GM's share of the business in the months ahead, to something closer to its prewar peak.

The other two members of the Big Three will fight it out for second place as heretofore. The Chrysler strike will necessarily upset current sales relationships, but, under normal labor and supply conditions, Chrysler later on may resume a position approximating one fifth of the U. S. market.

Later in the year, when the automatic transmissions are available for the Mercury and Ford lines being supplied by Borg-Warner, some further swing in favor of these models may be witnessed. As a longer-term consideration, the reinvigorated Ford enterprise may be able to raise its trade position still more, although it will admittedly be no easy job, with about two thirds of the entire market in the hands of GM and Chrysler.

Among the smaller concerns, Studebaker is leading the volume parade right now and may remain in that spot for at least a further interval. Its timely reductions substantially minimized the price gap between the Little Three and the Champion line; moreover, this manufacturer's cars will be the first to have the new Borg-Warner transmissions.

Hudson's new Pacemaker line has widened its market for 1950. But the medium-priced field has many entries, and the going will probably be rugged.

Besides the new Nash and Kaiser-Frazer additions, Packard plans to introduce a new series. This should give a lift to Packard's volume, although the new vehicle is expected to be a medium-priced car and not one to sell in the really big-volume class. There is also talk that Willys-Overland may take the plunge with a new passenger car offering.

INTANGIBLES IN THE PICTURE

There are intangibles in the picture that could eventually modify the present competitive setup. The question of "bigness" in industry might lead to Government action that could help the independents' position against the larger producers. It will be interesting to see how one company,

which has received substantial financial support from the RFC, is able to make out on the sales front. After all, this will be the acid test.

The incoming tide of competition is expected to surge more strongly as this year goes on. It is possible that the additional lines under way in the independent division of the trade, plus intensive selling efforts, may place some check on the recent trend in favor of the Big Three. But that these activities of the smaller companies will completely reverse that trend is doubtful. To this observer, it appears likely that the expanded activities of the smaller companies will make conditions mutually more difficult in their part of the field.

Unless the independents are able to get over 10 to 12% of the business, their combined piece of the pie—even in a good automobile year—would be no more than some 500,000 units. On that basis, it will obviously be impossible for more than a couple of these companies to sell, say, 150,000 cars a year and still leave any significant market for the others. The economics of the industry being what they are, this is equivalent to saying that at best, only a favored minority among the smaller concerns can be expected to make substantial profits over an extended period. (Applause)

* * *

Chairman Hansen: Thank you. Our next speaker complained a little bit to me when I handed out his assignment. He said, "Why do the other boys get a whole apple and all I get are pieces?" You might gather that Mr. Thorp is going to talk on the automotive parts industry. Mr. Thorp is a graduate of Union College, and, for some reason that isn't clear to me, he put down here "not to be confused with the Theological School." I don't think anybody that knows him would ever confuse it that way. He joined Laurence M. Marks & Company in the beginning of 1934 and since 1938 has been a partner of Laurence M. Marks. Mr. Thorp! (Applause)

* * *

Mr. Harold I. Thorp: All of us are familiar with the term automobile plant, but it requires a trip through one of these plants to appreciate fully the significance of the term. Such a trip often begins in the engine assembly department, as this department is usually the largest one other than the main assembly line. The completed motor is fed in at the side of the main assembly line at a relatively early stage so that it is only a few steps back to the beginning of the line. Fundamentally, an automobile is a welded steel frame with the motor, the wheels, the body, the bumpers, and the windshield wipers hung on or piled on above, below, and at the sides.

At first the frame has an exceedingly naked and clumsy look as it moves along the assembly line on steel trucks holding it up by the middle. Then the wheels are fastened on, and thereafter, as it rolls along and accumulates, from the subassembly lines at the side, such things as electric systems and steering assemblies, the frame rapidly attains the appearance of and, in fact, is a functioning automobile. All it needs to become a glamorous automobile is a fancy dress, and, fittingly enough at the body drop, a streamlined

green or blue or black creation is dropped on over its head. Thereafter, the frame is seen no more except by garage mechanics or occasionally when some fancy driver deserts his glamorous automobile unstreamlined with its bottom-side up in a ditch.

TWO VIVID IMPRESSIONS

The careful observer on his walk through an automobile assembly plant will receive two vivid impressions. One impression is that the plant is primarily an engine manufacturing and automobile assembly-line operation. The other impression, if one has even a little knowledge of the industry, is of the vast network of plants which feed to this line where the automobile is created. It is here the wheel and brake drum already partially assembled by Motor Wheel and Campbell-Wyant at Lansing meet the tire from Goodyear at Akron and the brake lining from Thermoid at Trenton. Here the Budd body from Philadelphia meets the Smith frame from Milwaukee and is decorated with Mohawk carpets held down by United-Carr fasteners from Boston.

To appreciate fully the flow of parts to the assembly line, no trip to an automobile plant is complete without a brief visit to those men whose god is "the schedule" and whose problem is geography and the many ways in which a parts supplier can fail to deliver specified quantities of a certain part on time. Your visit with these men necessarily will be brief. It seems to make little difference whether the part is supplied to the Dodge plant from Electric Auto-Lite or to the Pontiac plant from Delco-Remy. Always the assembly plant schedule men and expeditors have troubles.

But "the schedule" explains many things about the automobile and automobile parts industries. In fact, as the tempo of automobile assemblies rises toward a capacity schedule, I am sure there are many more men worrying about meeting that schedule than there are men who in recent years have worried about the stock market. To avoid interruptions in "the assembly schedule," the automobile manufacturers as a policy always try to have at least two sources of supply for any part. For a parts company supplying a small inexpensive item such as spark plugs or fasteners, it is relatively easy to meet peak assembly schedules. However, to supply electric generator sets, bodies, or transmissions for these peak schedules requires a large plant investment. In view of the size of the plant investment required on the part of the supplier and the importance to the automobile manufacturer of service and of co-operation on model changes, relationships between a parts supplier and a particular automobile manufacturer tend to become semipermanent. Price becomes a matter of negotiation with both supplier and buyer knowing very closely the costs involved.

MANUFACTURERS PRODUCE SOME PARTS

In addition to buying parts from independent suppliers, all the automobile manufacturers produce some motor and chassis parts while General Motors subsidiaries produce a large portion of the parts used by its automobile assembly divisions. Ford now appears committed to a policy of bringing in more and more parts to be manufactured in its own plants. The new Buffalo pressed steel unit will handle

some 40% of company stamping requirements, formerly contracted with outside suppliers. A new die casting plant to be built at Monroe, Mich., will produce hardware and other castings now purchased. Within the past month official announcement was made of plans to build an \$8 million foundry and motor machining plant in Cleveland. This plant plus the Detroit casting facilities will make Ford largely independent of outside foundry companies. However, the Ford changes affect only a small number of the several hundred independent automobile parts producers.

The parts turned out by both the auto makers and the independents have two possible applications: namely, they can be assembled into brand new cars, or they can be used as replacement parts for keeping old models running. An idea of the relative size of the two markets can be obtained from the estimates of wholesale value for 1949 replacement sales of parts and accessories at around \$2 billion and a corresponding figure for automobiles and trucks sold of around \$8 billion.

REPLACEMENT PARTS PROFITABLE

For both the automobile manufacturer and the specialized parts producer, the sale of replacement parts is more profitable than the sale of original equipment. The Federal Trade Commission reports that during six of the years between 1929 and 1937 General Motors made an average net profit of nearly 25 cents on each dollar of accessories and parts sales, compared with 7 cents on each dollar of new car sales. Figures obtained from several specialized parts producers show a pretax net profit of 4 to 6% higher on sales of replacement parts. But there is an offset to these higher profit margins in that a substantial amount of working capital is tied up in inventories and receivables. Working capital turnover is low with an annual rate of only two to five times indicated.

SELL THROUGH SPECIALIZED DISTRIBUTIONS

Most of the independent parts makers sell to the replacement market through specialized wholesale distributors such as National Automotive Parts Association, McQuay-Norris, Thompson Products, Electric Auto-Lite, and Federal-Mogul. National Automotive Parts Association is owned by 26 distributing companies which through 40 owned warehouses sell parts made by 30 different manufacturers. Companies such as Thompson Products which manufactures several engine and chassis parts must purchase a number of parts that it does not manufacture in order to offer a reasonably complete line. The various catalogues of Thompson's service division lists 24 lines of major engine and chassis parts, totaling 22,000 separate items. Furthermore, to furnish adequate service, it is necessary to maintain warehouse stocks at 35 to 45 countrywide locations with larger stocks at 5 to 10 key distribution points.

These specialized wholesale distributors supply parts to the country's approximately 6,000 parts jobbers who in turn sell to garages and repair shops. At the last official count, in 1939, the United States had over 50,000 general auto repair shops and another 10,000 shops specializing in the repair of brakes, radiators, ignition, and such. A big volume of independent-made parts is sold by retail stores and mail order houses. Most of the country's 240,000 filling stations

carry some replacement parts for your car. A typical Esso station, for example, will sell you batteries, radiator hose, fan belts, light bulbs, spark plugs, and about a dozen other items. Most of these parts are sold to the bigger oil companies for their stations directly by the independent parts makers. Other filling stations buy their parts from jobbers.

But of the nearly \$2 billion wholesale value in replacement parts and accessories sales last year, General Motors, Ford, and Chrysler accounted for an estimated 55%. The automobile manufacturers market replacement parts through the country's 40,000 or 50,000 new car dealers who sell directly to the man behind the wheel as well as to repair shops and garages. It should be noted that the automobile manufacturers are selling not only parts produced in their own plants but also parts purchased from the independent suppliers. Thus, the specialized parts producer who is selling bearings or valves or pistons to Chevrolet or Ford usually has no way of knowing whether they are used in assembling new cars or are distributed to dealers for the replacement market. However, in carrying out this wholesaling function, the automobile manufacturers are performing the same job as National Automotive Parts Association, McQuay-Norris, and others.

Since 1945 almost all the automobile manufacturers have placed increased emphasis on replacement parts sales. Ford, which had 8 central warehouse stocks before the war, has added 6. Chrysler has added warehouse stocks and now gives special discounts to dealers selected to wholesale its parts in the larger cities. General Motors now stocks about 315,000 separate parts at 105 warehouses around the country. Chrysler supplies about 107,000 different parts, Ford some 47,000, Hudson 25,000 and Packard about 18,000. General Motors also is using a new parts distribution plan that supplies faster-selling parts to dealers at lower prices and allows special discounts on parts resold to garages and repair shops.

Possibly in another year or so the auto makers will not be so interested in the replacement parts market as they have been since the end of World War II. Prewar and during the early war years, the wholesale value of replacement parts and accessories averaged around \$500 million annually. Then, as the War Production Board allowed the production of parts essential to keep civilian automobiles running, the value figure moved upward to \$816 million in 1944 and \$1.3 billion in 1945. Thereafter, it zoomed to \$1.7 billion in 1946, \$2.3 billion in 1947 and \$2.5 billion in 1948.

But during 1949 the trend appears to have reversed. Comparison of dollar sales by quarters with the same quarter of the preceding year shows the first quarter down 2%, the second down 24%, the third down 29%, and the fourth down 33%. For the full year 1949 the indicated final figure is \$1.966 billion, a decline of \$616 million or 24%. This decline in sales volume seems to be leading to increased competition, as within the past month there was a 5% reduction in piston and bearing prices, a reduction in storage battery prices and a rearrangement in discounts.

As with most other industries, there have been abnormal conditions in the automobile replacement parts market during the postwar period, and these abnormalities still exist.

Of the 32,731,000 cars registered July 1, 1949, two thirds were built before the war and only 10,731,000 were listed as postwar products. At the time of the count 1941 models, that is, eight-year-old cars, led all the rest with 4,004,000 in use, and 13,899,000 cars or 42% were ten years old or older.

Prewar, it was believed the need for replacement parts began for the average passenger car when it was about two years old and continued until it was about six years old. Thereafter, the only money spent on its maintenance was the minimum amount necessary to keep it moving. Based on the U. S. Public Roads Administration figures for passenger car and truck registrations, the wholesale value of replacement parts sold averaged \$15.30 per car in the five-year period 1936-40. The corresponding figure for 1948 is \$65.50 or nearly four times higher. In part this figure reflects higher prices, but in the main it reflects the fact that the eight-year and older car is being exceedingly well cared for these days.

Among replacement parts sold, the highest dollar item is a new motor at a wholesale value of around \$125. I know of no source of exact information, but, according to trade estimates, motor sales prewar were around 100,000 annually whereas in the past three years they have been around 1 million annually. If these estimates are reasonably close, a large number of people are planning to keep their old car running a few years longer.

Despite the length of this discussion of replacement parts sales, they are not so important to the parts producers as original equipment sales. Of the 50 to 70 large companies in the industry, many are solely dependent for earnings on original equipment sales. Among the larger companies, Electric Auto-Lite and Thompson Products report an annual breakdown of their sales. In 1948, Electric Auto-Lite had original equipment sales of \$141 million and replacement sales of \$54 million. Thompson Products had original equipment sales of \$34 million and replacement sales of \$28 million. Any substantial change in original equipment volume has a major effect on the earnings of the parts producers. Thus, to know the outlook for the automotive parts industry, all you need do is to put ditto marks under your notes on the outlook for passenger car and truck production.

Nevertheless, the industry is a sizable one, as the sales of 35 of the larger companies were \$1.3 billion in 1941 and \$2.8 billion in 1948. The industry is also an interesting one to follow. Several years ago the basic patents expired, I am told, on tapered roller bearings. A small Detroit company, Bower Roller Bearing, apparently decided to become the second source of supply the automobile manufacturers are usually willing to have. For 1949 Standard Statistics estimates Bower's earnings at \$5.25 per share whereas those of its larger competitor, Timken Roller Bearing, are estimated at \$1.25 per share. Intermittently, there are companies in the industry that show an outstanding rate of growth. Peak earnings of Federal Mogul during the 1936-39 period were \$1.28 per share, but 1948 results were \$4.44 per share.

Of new automotive developments, automatic transmissions appear of major importance to the independent parts producers. Some 80% of the car buyers who have been

offered the option of automatic transmissions have specified them. This percentage may drop temporarily when they are offered in the low-priced car field, but 90% of all cars are expected to be so equipped eventually. Borg-Warner has been the major beneficiary to date and has been especially active in the development work. However, there are rumors that Eaton Manufacturing will furnish hydraulic pumps for the transmissions to be manufactured by Ford and that other companies will be manufacturing automatic transmission parts. Any automotive development that adds to the dollar value per car increases the dollar sales volume and resultant earnings of the parts producers. (*Applause*)

* * *

Chairman Hansen: Thank you.

Rounding out our program, our next and final speaker is going to discuss with us the commercial vehicle division of the industry. Mr. White grounded himself a year or so ago after several years with Curtiss-Wright and joined the staff of Mack Trucks as assistant to the executive vice-president.

Now, Mr. White has pulled a fast one here, too. He says he served on Wall Street to learn the industrial picture from the top side. I don't know just what he means by that. It gives me pleasure to introduce Mr. White. (*Applause*)

* * *

Mr. Jesse E. White: In comparison with the passenger cars, it is very easy to overlook the contribution of the commercial vehicle to our economy. As a matter of fact, the average individual only thinks of the truck as something that gets in his way when he is on the highway, or something that has hogged the only available parking spot. I wonder how often people stop to analyze how dependent our existence is upon the truck. If it weren't for the truck, materials for home construction couldn't be moved, food and fuels would not be available. If it weren't for the truck, we would not even get our morning or evening newspaper.

While overshadowed by its big brother, nevertheless the commercial vehicle represents approximately 25% of the dollar volume of total automotive industry. There were 7 million trucks in use in 1948, and with the vehicles produced in the last year, the year-end total in use is approximately 7,500,000.

Because of the wide range of trucks produced, all vehicles are classified into seven groups by gross vehicle weight, which provides precise information concerning the activities of each segment of the industry. But, for the sake of brevity herein, rather than discuss each group separately, I shall deal in terms of the outmoded classifications: namely, light, medium, and heavy trucks.

You understand, of course, that the industry uses the seven gross vehicle weight groups.

In 1949 the 1,125,000 vehicles built are broken down roughly as follows:

Light trucks	70%
Medium trucks	26%
Heavy trucks	4%

The light and medium field were dominated by Chevrolet, Ford, Dodge, International Harvester, and GMC, and these same five companies accounted for 85% of all production. In the heavy field, there is Mack, GMC, White, International Harvester, and Autocar. Although the heavy field accounts for only 4% of the total number of units, it represents a much larger per cent in terms of dollar volume. The figures are not available for comparative purposes. Although the total vehicles produced in 1949 was off 17% from 1948, closer analysis reveals:

Light trucks up	5%
Medium trucks off	46%
Heavy trucks off	43%

The peak sales of the commercial vehicle industry occurred in the second quarter of 1948; since that time we have been on a steady downhill trend, and it is anticipated that this will continue during the first quarter of 1950. Naturally, the first quarter of 1950 has been materially affected by strikes, which everybody fervently hopes will be settled very promptly. Nevertheless, the actual figures for the first two months of 1950 are very discouraging, as we had originally anticipated that the leveling off in our industry would occur at this time.

Therefore, it is necessary to revise original forecasts and, with the usual form of optimism, now say that the second quarter of 1950 should show the bottom of the valley on our charts. Insofar as the remainder of 1950 is concerned, there will probably be some minor peaks and valleys, but it should, in the over-all, confirm the leveling off status of the industry as a whole.

In spite of the obscurity of the factors that basically affect our industry, 1951 with likewise optimism, we trust, will show us on the road to our normal growth pattern.

To arrive at this trend, it is necessary to examine the segments of the industry, the largest of which as stated before is the light and medium field. During World War II the production of light vehicles was prohibited, medium vehicles were limited to military and essential civilian production, and so, after the war was over, there was a pent-up demand for these groups of vehicles, especially the light trucks.

Detailed examination of the underlying statistics shows that light truck production reached a postwar high in the third quarter of 1949. Although the fourth quarter production showed a decline, this is probably attributable to the steel strike, and current indications show a steady demand for this size truck. This demand consists largely of replacements of which I will speak later.

In direct contrast to the light vehicles, the medium group, after holding steady through the first quarter of 1948, started a severe decline. This medium-group slump, which continued during 1949, accounted for the poorer showing of the industry as a whole last year. The trend of this group, including the first two months of 1950, gives all indications of leveling out.

If this leveling out process occurs, together with the predicted steady demand for light vehicles, then our forecast for the second quarter will become a reality.

In regard to the heavy vehicles, in which I am naturally a little more interested, detailed examination finds that the

peak was in the second quarter of 1948 coincident with the industry peak, and the year 1949 gave indications of this group having accomplished its postwar adjustment.

Security analysts are well qualified to analyze the over-all economic conditions of the United States, and I am sure that they are thoroughly cognizant of all the predictions that have been made by authorities far superior to myself concerning the various economic factors that affect the commercial vehicle industry. However, I would like to give you some facts which point to an interesting and prosperous long-term outlook for the industry. These few facts point out the inadvisability of the selling the industry short.

The present average age for trucks is seven and three-fourths years and in 1952 the first postwar trucks will come of age. To show the possibilities for an average replacement market, the 300,000 trucks built in 1945 would be seven years old in 1952, and in 1953 the 950,000 trucks built in 1946 would become of average age. With over 7,500,000 trucks in use now, replacement on an average every seven years would spell out the sale of a million trucks a year. At the present time, the trend is toward a lower average truck age. The prewar age was about five and one-half years, contrasted with the present seven and three-fourths years. In 1940 there were only 5 million in use and 700,000 produced. Another factor in the replacement picture is that the 70% of the trucks now in use are in the "light" and "medium" classifications. These vehicles are very susceptible to replacement on a similar basis as passenger cars because of style changes. Eye appeal is good merchandising in cars, and it also applies to trucks. This accelerated replacement of the light and medium trucks would be compensated in the over-all average by longer operation of heavy vehicles. Later on, I would like to mention another phase that will accelerate the replacement of currently operated vehicles, but first let me dwell for a moment on the inherent advantages of the truck as a form of transportation.

TRUCKS GAINING IN FAVOR

Trucks have been gaining in favor since the '30's and apparently will continue to gain favor because of their extreme flexibility in the movement of products and materials from "door to door." With the cost of materials handling as it is today, this creates an important demand for trucks. This is most important in short-haul shipments from manufacturer to market. In normal competitive market, the speed of movement can have a market effect on reducing merchandise inventories, and speeding up the turnover cycle. This speed of movement from door to door also makes the truck a desirable form of transportation for certain long-haul operations. For this type of work, the commercial vehicle industry has a vehicle commonly referred to as a tractor. In reality, the tractor is a high-powered short-wheelbased truck and, in the most common form, has attached to it a semitrailer. In certain states, where regulations permit, combinations consisting of a tractor and semitrailer plus a full trailer may be seen on the highways. The tractor and semitrailer move goods both day and night over long distances. Many of the vehicles you see on the road in the eastern states ply their way from Florida to Maine and back again. A survey shows that tractor combinations ac-

count for two thirds of the total ton-miles in recent years. The trend is definitely towards increased utilization of this type of haulage. It is interesting to note that, with the increased distances being covered by the over-the-road trucker, less tractors are now required for each trailer operated. The most recent figures available show that intercity operators average one tractor for every two trailers.

Another advantage of the truck is the way it meets the needs of our changing economy. You are all familiar with the facts concerning the decentralization of industry. The truck has played a very important role in this picture as locations formerly inaccessible by rail or barge are now available as plant sites through use of trucks. The uneven increases in population have resulted in changes of principal markets, and the accessibility of some of these markets for proper servicing is only through truck transportation. New businesses are continually cropping up. This further development of our economy would be impossible, were trucks not available. The frozen food business, which has shown such marked advances since the war, and, more particularly, the development of citrus concentrates are examples. The position of the farmer in our economy is, of course, a complete story of American ingenuity and mechanization. Here again, truck transportation is a prime factor in the operation at high productive levels and in the movement of produce to market. And, finally, of course, the end of the base point pricing system has brought about a condition, where the demand for economical truck transportation beyond the short haul has reached great heights and probably in the future will reach even greater heights.

This country would not be the power it is today without its tremendous networks of highways. Of course, you have all read in the paper recently of some of the problems concerning future highway maintenance and development, particularly applying to heavy trucks. It is assumed that these problems are not insurmountable. With the continued growth of intercity highways, we can foresee increased volume of business handled by the over-the-road trucker which will, in turn, increase the demand for that type of vehicle.

I spoke before, of course, of the replacement market, but there have been, and always will be, developments in the commercial vehicle field which have, in the past, accelerated replacement. With the millions of dollars being spent every year on research and development toward better vehicles, I can assure you that replacement of present-day vehicles will be accelerated by the new developments. There is one that I can speak of as being a current item, and that is the Diesel engine. Of course, the Diesel is adaptable to the heavy over-the-road trucks in use today, where large mileages are run up every year. The Diesel engine and its economies represent today the savior of the long-haul operator who is being constantly squeezed between gross revenues and increased operating costs.

All the foregoing has been in connection with the overall commercial vehicle industry, but I would like to take my closing minutes to speak of other transportation vehicles which are a very vital part of the industry but sometimes are overlooked by the magnitude of the trucking form of transportation. The first of these is a form of transportation that relates, not to product, but to people. I speak, of course, of the bus. Millions and millions of passenger-miles

are traveled every day in buses, and the bus picture should be particularly interesting to you because of the crying need of adequate forms of financing of the various transit systems. With financing, our transit systems can replace outmoded equipment, outmoded in the sense that there is new equipment available which can pay for itself over a period of time by its savings in operating and maintenance costs. There are over 175,000 buses of all types running around the highways and cities in the United States today, including 57,000 transit buses. These buses must be replaced at the rate of about 7,000 a year. Part of this 7,000 a year, of course, represents the conversion of trolleys to the motor transit bus. One of the factors that accelerates the replacement of transit buses is the necessary conversion to the economic Diesel engine operation.

Another form of transportation vehicle which is a highly specialized market but, nevertheless, very important to our economy is that of vehicles commonly referred to in the trade of "off-highway" vehicles. These monsters are important to the strip-mining industry, the logging and pulpwood industry, and the construction games, which requires mass movements of earth and materials. The potential market for this type of vehicle is tremendous in comparison to what we have known in the past. Although this vehicle represents a small portion of the dollar volume of the truck industry, this market will continue to be an important segment of the industry.

And so, I close my little story with the hopes that you will carry two facts in your mind.

1. Look for lower level production and a leveling out in the commercial vehicles field for 1950-51.

2. Watch the long-range potential, and don't sell the truck industry short. (*Applause*)

* * *

Chairman Hansen: Thank you, Mr. White.

Now, in the question period which is to follow, please address all your questions to the speakers by name.

Question: Mr. White, how do the tractors work into the classifications you mentioned before? Is it according to the vehicle weight of the tractor plus the trailer, or just the tractor?

Mr. White: No, the tractors are classified as units themselves. In other words, a 20,000-pound tractor is just the tractor, itself.

Oh, I'm sorry; it is with the trailer, for classification purposes. Most of the tractors fall into what I referred to as the top side of the medium group; the light heavies and the heavies.

Question: Mr. White, is the average age of a trailer the same as that of its tractor?

Mr. White: Well, we used to be in the trailer business. Fifteen years ago we could have answered that, but I am sorry I can't answer it to-day. However, I believe that the average life of a trailer is longer than the prime movement.

Chairman Hansen: I have a question that I would like to address to Mr. Thorp: We were talking about the demand for passenger cars. I think probably one of the most important things in the profit picture last year was, of course, the sharp rise in unit volume. Yet, during this postwar period we have had a contributing factor, at least, with respect to

profit margins, and that is the large sales of parts by the assemblers. Last year that took quite a decline and was, of course, obscured by this sharp rise in the passenger car sales themselves. Do you think that in 1950, with a decline of some proportion in passenger car sales and lower prices, this will make itself felt in narrowing profit margins materially? In short, it was obscured in 1949. Is it going to be an important factor in reducing profit margins in 1950?

Mr. Thorp: The question comes down, as I see it, to the extent of the volume decline. As I tried to point out, one of the figures which are unavailable to us to give us a real analysis of the replacement parts market is the number of engines sold. If that constituted a major portion of the volume of the automobile producers, you would not have any large decline in the replacement parts market for the manufacturers of pistons and other items which are going as sales in replacement parts to keep the automobile moving.

I think that the extent of the decline in the new car market is the governing factor.

Question: Mr. DuBrule, would you care to tackle what in your thinking is a normal, typical postwar year in the passenger car business, as to the number of units?

Mr. DuBrule: What is the normal year in the automobile business? Well, as near as I can find out, there isn't any such thing.

Question: Where is it going to level off?

Mr. DuBrule: It never has leveled off. You eliminate most of the business cycle, and you will eliminate most of the fluctuations in the automobile industry, but, to whatever extent we still have a business cycle, I suspect we will still have exaggerations of that in the automobile industry.

Question: What would you think the average for the next five years might be?

Mr. DuBrule: I don't make predictions that far ahead, because I can't outguess the political minds.

Question: Does the business cycle have more effect on the automobile industry, or does the automobile industry have a major effect on the business cycle?

Mr. DuBrule: I guess that is a fair question. The regression between changes in national income and changes in automobile sales shows, of course, a much greater change in automobile sales than in national income. You get practically no change in the usage of the car. That is, if you studied the trends in the industry over a period of time—if you take 1930, when the sales fell sharply, or '29, car usage actually went up. Sales fell further in '31, and usage went up again. Sales fell further in '32, and usage fell a little bit. For the first time in the history of the industry, in '32 there was a slight drop in usage, as measured by gasoline consumption, of passenger cars.

So, we have that situation, that the use of the product is extremely inelastic. It is one of the most inelastic factors in relation to changes in income, whereas the purchase of new cars is very elastic with respect to changes in income. It is in the order of certainly two to one—or one to one, at least.

It is pretty hard to tell exactly which comes first. We have been making some research studies on that, studying the changes in income by states, as against total changes in income, and, of course, we don't have too many observa-

tions that are reliable, so that it is difficult to make any dependable regressions. There are too many degrees of freedom in the equations. However, if you look back to 1937 and '38, you will find that in a number of states, even though there was a very sharp drop in industrial production and some drop in national income, the income actually went up, compared with that in '37. Sales fell in those states just as well as they did in the states where there was a sharp drop in income. Maybe not so much, but they fell just the same. That seems to indicate that possibly it is anticipation of a person's income position that is going to be governing that to a very large degree. That is, when you have a car, you, as the country found out during the war, can get along without another car or without a new car, and, therefore, psychological attitudes with respect to prospective income seem to have a great deal of weight in the matter. Probably automobiles—and I suspect radios—are more subject to postponement based on anticipated drop in income, or protection against such drop, than almost any other durable consumer goods.

Certainly, when a major industry like the automobile industry does drop appreciably in sales, it does have a substantial effect on a number of other important industries and on the aggregate of employment. To that extent, well, I'll put it this way: My own opinion of the matter, from my own research, indicates to me that the bad boy is mismanaged monetary policy rather than these terrible industrial leaders and how they want to lay off all their workers and send them walking the streets, as the union leaders maintain.

I am not sure I have answered your question, but that is what I know about it.

Question: Mr. DuBrule, it seems to me one of the major questions in the industry's outlook is the satisfactory renegotiation of these labor contracts which are coming up this spring and summer. I wonder if you would care to give some generalizations of the situation for GM.

Mr. DuBrule: I don't know of anything more dangerous to talk about than what will happen in labor negotiations. I have been in too many. Even if I had any ideas, I wouldn't express them. But actually it is a lot more difficult to forecast any particular settlement of a particular labor situation than it is to forecast the stock market.

Question: Mr. DuBrule, in my knowledge, no observer of the industry has predicted an output in 1950 greater than that of 1949. If that is so, why is it that the industry is now producing at a rate 5 to 10% higher than last year?

Mr. DuBrule: Probably because we can get the materials, and the public wants the cars. (Laughter)

Question: You are deliberately producing more now in anticipation of a greater bulk later on, instead of trying to level the production off over the year?

Mr. DuBrule: Well, each manufacturer controls his own schedules. He doesn't control the industry. Nobody controls the industry except the consumers. The manufacturer only controls his schedule against his own retail market. In a competitive market each one is looking out for himself, and, as long as the public wants his cars and he can get the material, I suspect he will go right ahead and attempt to satisfy that market. I think that is what he is expected to do. Any substitute for it would require something like

OPA attempted for a while, or OPM did, rather, and rationing and restrictions, and, when they start that, it won't stop with automobiles, either.

Question: Mr. DuBrule, you mentioned that the average car—someone determined that inventories of mileage are in the hands of consumers. Do you keep any index of that? Would it have any significance?

Mr. DuBrule: We are always analyzing it. We analyze the composition of their cars and their values. Of course, even a third of the cars in use—even present use—were of practically no significance to the new car manufacturer, because they were of such low value that they represented practically no capital asset value. The dealers that got them usually scrapped them. In other words, they were what we commonly call junkers. They have some economic significance to the oil industry and some to the tire industry, although on a per vehicle basis, much less than the newer cars, because the records show distinctly that, the older cars get, the fewer miles they run per year. So, you can't appraise their economic significance numerically without taking in that weighting factor, too.

If one of those cars got wrecked and the man bought it for \$50, well, he is not exactly a replacement buyer, or at least not a very significant one. *(Laughter)*

The significance of those figures is a little different. It is much more important insofar as the new car level is concerned, the income levels of people who are in the new-car buying class and their willingness to trade—the point I was discussing before.

Question: Mr. DuBrule, last week I was told that repossession of cars by the finance companies is starting to increase rapidly. Isn't there a possibility that, with these cars being sold now with nothing down, for the first time in history, repossession might be a big factor in the market by late this year?

Mr. DuBrule: I don't know of any finance company financing cars on nothing down. I'd say, if they were, they probably wouldn't be in business very long.

Question: The papers advertise it every Sunday. They say nothing down, three years to pay.

Mr. DuBrule: I wonder who is carrying that. We don't finance cars that way, I can assure you. *(Laughter)*

Voice: I followed up that nothing-down business, and it is not genuine. I followed it up in half a dozen spots. You can't buy a car for nothing down.

Mr. DuBrule: I would rather suspect you are right.

Question: I wonder whether Mr. Warde or Mr. White would want to discuss the position of the independents in the commercial field, and particularly whether tie-in sales of automobiles and trucks during the past year helped the "Big Three"—particularly in the commercial field.

Mr. Warde: That breaks down to a couple of questions, I think. Frankly, I came here slanted entirely on the passenger car side today, but Mr. White touched on the fact that the "Big Four" in the truck industry account for 85% or probably more of the unit business. Just as has been the case in the passenger car field, there has been a trend toward concentration of business, as you undoubtedly know, in the past year or so in favor of the big ones.

I believe Mr. White's comments on the subdivision of the business as between light, medium, and heavy trucks

bears very actively on that question, that distribution of business.

I think the second question was in regard to the tie-in.

Question: I know a lot of automobile dealers had to take trucks in order to sell new cars—to get their quota of new cars. Is that a major factor, or was it in the past year?

Mr. White: I would say it had little or no effect. I don't think you would find any case of severe tie-in. I know from personal experience, in talking to some dealers, that it has happened, yes, but I don't think it is very serious. It hasn't affected us, and we are independent.

Chairman Hansen: Mr. DuBrule, would you give us an estimate of the stocks of passenger cars in the hands of dealers and in transit thereto as of a recent date?

Mr. DuBrule: Unfortunately, that figure is not available, except to the extent that you can make calculations on the basis of what information the individual companies publish and then get estimates from the registrations of their sales, taking the production and sales and making an estimate there of their probable inventory.

I know of no reliable figures on that score. We know what ours are. I think each of the manufacturers knows what his are, but they are not pooled throughout the industry.

Chairman Hansen: I would like to ask one further question on the subject: Some of the trade publications carry estimates on that; in viewing those, do you consider them fairly reliable?

Mr. DuBrule: I don't know the degree of reliability in them, and I never trust figures where I can't judge the degree of reliability.

Question: You know your own figures. Wouldn't that give you an indication of the reliability of the total?

Mr. DuBrule: I don't think so. Maybe some of them have access to those figures privately and do make a good job of it, but I don't know of any way of judging the reliability of the total figures. I think the people who put them together are the only ones that might answer that, but we are not responsible for it.

Question: Mr. DuBrule, the total car population, I understand, is about 35 million, more or less. Would you expect to see that population expanded without a commensurate increase in national income over the next few years, or has that potential been reached?

Mr. DuBrule: I think that will depend on the total development of the economy. If we maintain a reasonably high level of activity, I should expect it to grow, both on an absolute and per capita basis, because it is obvious that everybody who wants a car hasn't got one, and, although sometimes when you get out on the road on a Sunday, you think that potential has been reached, it really hasn't. *(Laughter)* But, in turn, the concentration tends to force deconcentration and expansion in other directions. If one goes out to Los Angeles, he can see a large city that has grown up practically without benefit of streetcar transportation, and many of the cities are finding it actually pays in dollars and cents to put through these big highway developments.

So, it is a very complex set of factors, but, given a half-way break in the solution of the individual problems involved, my answer is yes.

Question: I am not sure you will thank me for this, but do you want a chance to comment on the fact that certain automobile manufacturers have made a very generous reduction in prices and General Motors has only made token reductions?

Mr. DuBrule: I think if you compare the prices we have on our cars with the prices that they have on theirs and what those ratios were prewar, you will find our prices are lower than theirs still.

Question: On the subject of price, back in 1938, Mr. DuBrule, a study was made, which you no doubt are familiar with, on this question of pricing and its influence on expanding the automobile market, I should say, indicating that there was not much to be gained beyond a certain point. Now, we are in a period when, after all, automobile prices look fairly high, although relatively they are not so exorbitant, and I wondered whether in your thinking there was an assumption that the market could be built up by the coming of price reductions.

Mr. DuBrule: Well, four fifths of the cost of running a car is operating it, and only one fifth is the capital outlay. So far, at least in this country, the American people seem to have been much more interested in performance and

large-scale comfort than in maximum economy, in gasoline usage, in tire wear, and so on. As long as that is the case—and their taste indicates that they would rather spend their dollars on more comfort and better performance and so forth—there doesn't seem to be very much elasticity of demand with respect to the price of the new car, itself, certainly not over one to one. And one to one, with a rigid cost structure, doesn't give you very much room for price reduction.

Furthermore, when you get down to reducing or building smaller cars, it is a question of how many people will want them at the price at which they can be built. You have to take value out faster than you take cost out.

Chairman Hansen: We have time for one more question.

Question: Mr. DuBrule, has there been any indication officially or otherwise of the percentage of the automobile market that could be captured by a single company without making that company vulnerable to the Antitrust Act? (*Laughter*)

Mr. DuBrule: I would like to get the answer to that from you! (*Laughter*) The nearest I can figure out is, if you are successful and grow, you are a menace. (*Laughter and applause*)

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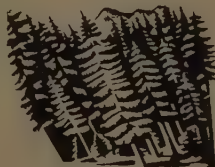
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April 4, 1950

Outlook for Banking

THURSDAY AFTERNOON, MARCH 2, 1950

LANCASTER M. GREENE, of Lancaster & Norvin Greene, presiding.

Chairman Greene: Our first speaker is a graduate of the School of Mines of Columbia, and, of course, that, by some process of chemistry, has converted him into being perhaps our best recognized expert on bank stocks.

Before I introduce him to you, I just want to say that, when it comes to the question period, our speakers would like to ask you to restrict your questions to the banking business rather than questions about which bank stocks you ought to buy at this time or about individual banks.

It gives me great pleasure to introduce to you Mr. Morris A. Schapiro. (*Applause*)

* * *

Mr. Morris A. Schapiro: The New York City banks with 25% of the country's banking capital are earning an average of 5¾% on stockholders' money; banks outside New York, 9%. Why? The question is answered differently in different places. You hear it said that New York banks are run by habit and tradition rather than by today's realities; that prestige is more important than profit; that the stockholder's interest is often not of decisive importance in determining questions of economy, expansion, and change; and that the interests of management and stockholders are not always parallel. In the banks themselves there is a different story. There, one hears that government restrictions limit their profits by impounding bank assets through required reserves, and by keeping interest rates too low and taxes too high. None of these provides a satisfactory explanation. Let us examine the problem.

Combined net current operating earnings of New York City banks in 1949 were about \$135 million or at the rate of 5¾% on their \$2,340 million total capital accounts. Cash dividends in 1950, using current rates, are estimated at \$85 million, a rate of 3.60% on stockholders' equity. The retention or net addition from operating earnings is \$50 million or 2.15% on the combined book value. These figures are before losses and charge-offs, profits and recoveries, reserves, and other capital transactions.

Earning power of the New York City member bank group at 5¾% is low compared with 9% for member banks outside this area. Why do banks outside New York City have about 50% greater earning power on stockholders' equity?

COUNTRY'S DEPOSIT GROWTH GREATER

First, deposits are high in relation to capital. The deposit-capital ratio is 14 to 1 compared to only 10 to 1 in New York City. This fact is not new. It has been developing since 1933. There has been a vast and continuing diffusion throughout the economy of liquid assets, resulting from deficit financing and heavy Government spending. Decentralization, new manufacturing plants, shift of industry and population are factors. Deposit insurance has helped

the deposit trend of small banks. Banks in important centers throughout the United States have experienced a growth greater than in New York and have succeeded in accumulating large banking capital, placing them in active competition with banks in the New York area.

The higher deposit-capital ratio of 14 to 1 means that outside banks have 40% more deposits per dollar of stockholders' equity than have the banks in New York City, while at the same time, these banks are subject to lower reserve requirements than prevail in the New York area. They do more retail business, get better rates on loans, and receive more adequate compensation for their general services.

New York City is the country's financial center. Banks here have correspondent and banking relations with financial institutions throughout the land, but their own reserve requirements are higher. New York banks must always maintain a greater degree of liquidity. As a group they are more dependent on big business at low rates than are the outside banks. Earning power here is more adversely affected by the refunding policies of the Treasury since the war. Thus, when called or maturing Treasury obligations are refunded at lower and fully taxable rates, the impact is greater on these banks with their relatively limited deposits.

HIGHLY COMPETITIVE

The difficult and destructive competition in which these banks are engaged is another reason for low earning power in New York City. The banks here compete for deposits with others and with one another. The higher rate paid by the mutual savings banks for thrift accounts has attracted funds away from commercial banks, impelling one leading bank this year to raise its rate on savings. Others are bound to follow. This condition, however, is not general outside New York City. It was demonstrated after deposit insurance was originally introduced that large depositors including national corporations increased their deposits in accounts with smaller local institutions. The current proposal to raise the coverage to \$10,000 will intensify this trend.

BANKS IN COMPETITION WITH GOVERNMENT

Large banks are also in competition with Government in rates and in services, and New York City banks in their dealings with large national concerns are also in competition for loans with nonbank lenders, such as insurance companies and others, as well as the investment markets. In the small loan field, all banks are competing with finance and factoring companies. Then too, all banks in this area compete with large banks in other principal centers for every important available loan. Finally, the banks within New York City compete with one another. Banking in New York is no monopoly. It is intensely competitive. As a matter of fact, there is a general fear among bankers that they will be accused by the Justice Department of operating a monopoly if they even discuss interest rates together. The

result has been a continuous price war. Stockholders suffer. Competition is so destructive that the condition can only be described as jungle business.

Meanwhile, the difficult earnings situation is aggravated by increased operating expenses resulting from costly installations and duplication of facilities which thus far scarcely seem to have been supported by the results achieved. No matter how one looks at the over-all situation here in New York City, it is evident that business is being transacted and services rendered for inadequate compensation. Bankers in their competitive fervor "to get the business," even though it is not immediately profitable, have usually had some indirect advantage in mind. But too often this has proved to be "pie in the sky."

LOW EARNINGS IN GOOD TIMES

The fact is that banks and banking services in New York City are essential and are being used by individuals, partnerships, and corporations throughout the country, as well as by states, municipalities, and the Federal Government, but it is equally true that in these years of activity and high prosperity the earning power on stockholders' equity is too low to justify their investment. This condition is reflected in the discount from book value at which their shares are quoted.

SIGNIFICANCE OF LOW EARNING

The significance of a low earning rate on stockholders' money should be clear to us all. If a bank's recurring operating earnings are \$5 per share or 5% on its book value of \$100, it follows that in order for the quotation to equal book value the market must appraise these earnings at 20 times. Such an earnings ratio is plainly too high under current conditions in the market for equities. The prevailing ratio for New York City bank stocks is actually but 15. Bank shares have been at a discount because of their low earning power. In the last two years, several of the smaller New York banks were sold by their stockholders, the business going to surviving banks. In each of these cases, the value of the bank was far in excess of the previously quoted price for the bank stock, and stockholders realized the full benefit in cash. Stockholders are naturally attracted to such proposals because in addition to the immediate gain to individuals, trustees are enabled to conserve assets for their beneficiaries.

MANAGEMENTS HAVE OBLIGATION

Banks at a discount ultimately means banks out of business. Bank managements have an obligation to find adequate earnings on stockholders' investment. Conversely, stockholders of banks whose shares are quoted at a premium are not likely to consider proposals for liquidation. In New York City of course, such banks are the exception. The obligation of bank managements to provide earnings for stockholders is, therefore, all the more pressing in the New York City area.

BANKS VARY

This pressure naturally varies from bank to bank, depending on the special conditions peculiar to the individual institution. Deposit-capital ratios, although averaging 10

DISTRIBUTION OF NEW YORK CITY CLEARING HOUSE DEPOSITS

Showing Percentage of Each Bank to Total of All Clearing House Banks
Based on Average Net Demand and Time Deposits
(Including U. S. Government Deposits)

Average Total Deposits—(000)	1940	1941	1945	1949
\$15,122,275	\$16,757,052	\$25,810,914	\$21,881,587	
Chase National.....	19.82	19.98	17.73	17.60
National City.....	16.70	16.82	16.42	19.44
Guaranty Trust.....	14.70	13.99	12.18	9.90
Bankers Trust.....	7.80	7.66	6.26	5.41
Central Hanover.....	7.61	7.40	6.54	5.63
Manufacturers.....	5.15	5.31	7.53	8.67
Chemical Bank.....	4.56	5.14	4.89	5.56
Irving Trust.....	4.61	4.46	4.20	4.42
First National.....	4.89	4.89	3.71	2.55
Manhattan.....	3.95	4.00	4.07	4.39
J. P. Morgan & Co. (†).....			2.74	2.56
New York Trust.....	3.00	3.03	2.75	2.42
Corn Exchange.....	2.18	2.20	2.72	3.18
Bank of New York.....	1.53	1.51	1.37	1.50
Public National.....	.93	.92	1.69	2.08
Marine Midland Trust.....	.86	.89	1.08	1.21
Commercial National.....	.77	.86	.92	.73
Brooklyn Trust (†).....			.89	.92
Continental Bank (a).....	.43	.45	.66	—
U. S. Trust (†).....			.50	.54
Fifth Avenue (b).....	.39	.38	.41	—
Lawyers Trust (†).....			.28	.31
Title Guarantee & Trust.....	.12	.11	.15	.22
Grace National Bank (‡).....			.31	.40
City Bank Farmers (*).....				.36
Totals.....	100.00%	100.00%	100.00%	100.00%

(*) clearing non-member, joined in 1946.

(†) joined in 1943.

(‡) joined in 1944.

(a) absorbed by Chemical.

(b) merged with Bank of New York.

to 1 in New York City, range from a high of 16.5 to 1 to a low of 4.2 to 1.

WHY SUCH VARIATIONS?

Why are there such variations here? The condition, although striking under present-day circumstances, is one that has been developing since the Banking Holiday in 1933. But let us compare the situation as it exists today with the period during the two years just before Pearl Harbor. Six large Wall Street banks whose combined deposits averaged 57.5% of the Clearing House totals for the 104 weeks ending December 31, 1941, showed an average of only 43.5% for the 52 weeks ending December 31, 1949. This represented a loss of position of 15 percentage points. Based on today's Clearing House totals of \$22 billion, this loss of position amounts to \$3 billion for these six banks.

The whole still being equal to the sum of its parts, the \$3 billion, however, has not just disappeared but is held now by other Clearing House banks. These other banks with the higher deposit-capital ratios that resulted are, therefore, now enjoying greater earning power on their stockholders' money. These are the banks having broader contact with the public, merchandising their services most effectively to little business and generally providing a retail type of operation.

Within the limits set by today's difficulties, these banks are in the more favorable position. They have succeeded in

making progress, having adapted themselves to existing conditions while attracting deposits from their competitors. For this reason, since their capital is fully employed, they are less likely to acquire other banks of important size. But they, too, are faced with many of the same problems of maintaining earnings that confront the other banks.

On the other hand, banks with the lower deposit-capital ratios find themselves in a better position to solve their problems by utilizing their excess capital in the purchase of banking institutions, thereby acquiring existing facilities, branches, and deposits. Within the last two years, five New York City banks have already been absorbed by this process.

REALIGNMENT

The situation would appear to be self-correcting. So compelling are the circumstances, that banking capital in New York City is being forced into realignment. Capital of acquiring banks is replacing the capital of retiring banks, and stockholders, aware of the implications of this development, have become increasingly sensitive to the situation.

RESULTS IN GREATER EFFICIENCY

The realignment process reduces the duplication of facilities and results in greater efficiency in operation and more effective use of funds. All of this, of course, provides large economies in operating costs.

Of more importance in the process is the fact that surviving banks increase their deposit-capital ratio and, with the additional deposits and facilities acquired, immediately improve their earnings. The pressure on management is eased.

RESERVES SHOULD BE BUILT UP

Although this process offers a solution to the immediate problems, when carried too far it can be contrary to the community's best interest. The country's business requires that our New York City banks remain strongly capitalized. To attract and hold banking capital, earning power is required large enough to provide a reasonable accumulation of reserves as well as a fair return to investors. In good times like these, reserves should be built up to cushion the shocks and readjustments of bad times. The monetary and banking authorities should determine the extent to which their policies and decisions are restricting banks from realizing adequate earnings on the capital supplied by these investors. A question that can properly be raised is the necessity of continuing to discriminate against the banks in New York and Chicago on reserve requirements.

CO-OPERATION NECESSARY

The long-range solution to the problems of banking, consistent with the public interest, can only be met by the continuous co-operation of practical, realistic governmental agencies and of forward looking bankers aware of their responsibilities to their stockholders and the country's business. (Applause)

* * *

Chairman Greene: I think that we will hold our questions until we have heard from both our speakers of today.

Our second speaker is an assistant-vice president of the

National City Bank. He graduated from Syracuse in 1927 and secured his Ph. D. from Harvard in 1933. He spent eleven years with the Federal Reserve Bank. It gives me great pleasure to introduce to you Mr. Norris Johnson, assistant vice-president of the National City Bank who is most concerned with bank credit. (Applause)

* * *

Mr. Norris Johnson: I am the speaker to be announced on the subject to be announced, and that covers a great deal of territory. In fact, Mr. Greene was kind enough to omit the subject of my remarks which gives me a rather free hand. The topic that I put down for myself is "Deposit and Money Rate Trends" for lack of something more satisfactory. I almost wish I had added "Political Trends" because there are some political trends today international in scope that are of more than passing importance to banks. I refer, and this is a short introduction to my real topic, to the nationalization of banks, and this is off the record as far as the press is concerned. I was in Australia during the war, the latter part of the war, and, as you may guess, got quite well acquainted with the Australian banking system. They have a few very large banks with widespread branches, and the Labor Government there proposed to take them over lock, stock, and barrel. You would be amazed at the degree of public resentment that that idea stirred up. I think the reasons are obvious when you yourself think about carrying on your confidential business activities through channels that are open to continuous surveillance by political authorities, and, if that can't happen in Australia, I don't see that it can happen here.

BANKING A RUGGED BUSINESS

The business of banking is to gain and hold deposits, to put these funds to use, and to earn a margin on the funds used over the cost of the deposits. This has been a rugged business, over the past fifteen years of cheap money policies. Bank earnings have suffered. One redeeming feature has been that deposit volumes have been large and sustained. Another is that the cheap money policy has had some structural improvements, especially since 1947. Banks have had to reduce interest rates on savings accounts to very low levels and assess service charges on checking accounts in proportion to their "activity" or "expensiveness" to the bank.

STABILITY IN PAST THREE YEARS

The general record on bank deposits has been one of relative stability the past three years. Last year there was a \$1 billion increase, to \$144 billion for all commercial banks. In 1947 there was a \$5 billion increase, in 1948 a \$1 billion decrease.

The prospect for 1950 suggests some expansion in deposits. The Federal deficit of \$5 billion is almost bound to involve some reliance on bank financing; how much will depend on types of securities offered and also on Federal Reserve policy on short-term money rates. No disclosure of financing plans has yet been made. Currently, with the heavy first quarter tax collections, the Treasury is in comfortable shape, and despite the large insurance refunds going out to veterans. The real drain on Treasury cash will begin in April.

Bank investments in state and municipal obligations are continuing a gradual expansion, and there is no evident reason to expect any particular change in this trend. These, like investments in U. S. Governments, and loans, tend to build deposit volumes. Biggest question mark is loans. Business loans have shrunk very little since the year end, a good record in the light of seasonal forces of contraction. We probably ought to expect some more definite seasonal letdown before the autumn rise sets in. Some gain for the year seems to me probable at this distance, based on what we can see so far. But it is unsafe to try to make any real prediction. Business loans are generated out of levels of business, prices, and inventories. Your own forecast on business will tell you what commercial loans are likely to do if you are right. Among other loan categories, loans to Government security dealers are down; stock exchange loans are up; real estate and consumer loans continue a gradual growth. Another deposit-generating element is the probability of some further whittling down of currency circulation.

CHANGES MAINLY A RECTIFICATION

On money rates I would like to cover the background with one sweeping generalization. Viewed broadly, money rate changes since war represent mainly a rectification of an abnormal spread in money rates, short and long, with a general framework of cheap money. Until July 1947 we had a $\frac{7}{8}\%$ yield on one-year certificates, and the longest-term Government bonds were selling to yield 2.3%. Now, after some intervening movements—within limits of $2\frac{1}{4}\%$ to $2\frac{1}{2}\%$ —the long rate again is 2.3% but the rate on one-year certificates, instead of $\frac{7}{8}\%$, is somewhere between $1\frac{1}{8}\%$ to $1\frac{1}{4}\%$. The rate to prime commercial borrowers is up from $1\frac{1}{2}\%$ to 2%.

Where we go from here is of course the question. I wish I knew. It can be said, however, that the general structure of rates has for the moment a firm base. The general assumption in the market is that any near term move from here will be toward a little higher rates.

MARKET EXPECTATIONS

What the market has to go on, in this expectation, is:

1. The recovery in general economic barometers during the last half of 1949, with the generally accepted presumption of a continuance when the coal strike is settled.
2. The revelation during the Douglas subcommittee's hearings last December that the Federal Reserve authorities were dissatisfied with the terms chosen by the Treasury for its January certificate refunding: namely, $1\frac{1}{8}\%$ on one-year certificates.
3. A perceptible improvement in the terms of Treasury refunding issues of February, March, and April.
4. The vigor with which the Federal Reserve authorities sold Treasury bills and certificates to mop up the surplus of funds generated by the return flow of currency from circulation after Christmas.
5. The resumption of Federal Reserve sales of long-term Government bonds in December and the continuance of this selling right up to date.

The firming of yields on Government securities that has taken place this year is of fairly microscopic proportions. The one-year $1\frac{1}{8}\%$ certificates issued January 1, for ex-

ample, have recently been traded on a yield basis of 1.15 or 1.16%. But I do not think we should allow the smallness of these changes to blind us to the fact that less circumscribed changes can take place when and if conditions warrant. I do not like to talk in riddles, but that is the best way I can put it. The June 1949 policy statement by the Federal Open Market Committee put maintenance of orderly conditions in the Government securities market in second place among criteria of Federal Reserve open market operations. First place was given to "the general business and credit situation." This means, if it means anything, more flexibility in money rates and in prices of Government securities.

CONGRESS ENDORSES JUNE POLICY

The Congressional subcommittee, which last year examined monetary and credit policies since World War II, endorsed the aims of the June policy statement in its final report issued two months ago. I quote from their report:

The essential characteristic of a monetary policy that will promote general economic stability is its timely flexibility. To combat deflation and promote recovery, the monetary authorities must liberally provide the banking system with enhanced lending power, thereby tending to lower interest rates and increase the availability of credit. To retard and stop inflation they must restrict the lending power of banks, thereby tending to raise interest rates and to limit the availability of credit for private and Government spending. And these actions must be taken promptly if they are to be most effective.

The key to the direction of Federal Reserve policy should be found in the business and credit picture. The authorities naturally will continue to be concerned with the success of Treasury refunding operations or, if you will, circumscribed by consideration of Treasury refunding problems. Here the Treasury has recently taken a constructive step by cutting down the frequency of public debt maturities and the amount of the floating debt. It has broken up the old routine of always—or almost always—offering one-year certificates in exchange for maturing issues. In December and February—and now in March and April—holders of maturing obligations have been and are being offered a little longer-term paper. Two-way flexibility is introduced into the Treasury refunding picture—in term as well as in rate—and the Federal Reserve gets a little more space to move around.

MOVE DICTATED BY HEAVY SCHEDULES

This move by the Treasury was evidently dictated by the heavy schedules of bond maturities these next few years. It is, of course, a welcome development to holders of these early maturities, faced as they are with problems of maintaining their investment incomes. They have now been given at least the basis of a hope that new obligations, offered in exchange for their holdings, will suit their requirements of income and term.

* * *

Chairman Greene: We appreciate very much these remarks by our speakers, and now your opportunity is here to get some questions answered by these experts. Are there some questions?

Question: I should like to ask what effect the so-called

immediate availability of funds would have on the position of New York bank stocks, should the ideas of the Federal Reserve with regard to that point prevail?

Mr. Schapiro: I understand that you refer to the policies of the Fed in making funds immediately available for checks in the matter of collections?

Question: Right.

Mr. Schapiro: To the extent that banks have the use of uncollected funds for a few days, there is a source of slight additional income. But this extends to larger issues. Banks are in competition with Government in rates and in services, and the question touches on competition in services. The banks in New York are the nerve center of a network of correspondent bank relationships throughout the country; but the Federal Reserve System, the Federal Reserve Bank of New York, too, has sought and is continuing to seek the accounts and solicit membership of correspondent banks and is, therefore, competing with the New York banks. The balances which correspondent banks maintain in New York have been a source of income for the New York banks; yet the New York banks must constantly give more and get less. They give more because the Federal Reserve System is giving more in its endeavor to induce nonmember banks to join up; the New York banks get less because the interior banks can use their balances more profitably in local areas, and so there is a constant narrowing down of the return to the New York banks. We have here a difficult situation.

This subject of the competition between the Federal Reserve System and private banking is extremely touchy, and bankers are hesitant to bring it out in the open. They all mutter about it to themselves and one another, but the general public is not aware of the intense competition that the New York banks, the money center banks, are encountering from Government.

There are some aspects of your question which involve details, and I am sorry that I am not able to give you the details that you might have had in mind.

Question: A question to Mr. Schapiro. Since the first of January, I would say that the market price of bank stocks in the City of New York percentage-wise has advanced far more than the general industrial average has advanced. Would you say that has any significance as forecasting a better earning ratio on the part of New York banks in spite of the fact that at the annual meetings held in January most of the chairmen and presidents indicated that the earning rate for 1950 would be about what it has been in the past?

Mr. Schapiro: That is a very leading question. The bank prices are about 3 to 5% higher, I'm guessing, than they were at the first of the year. The trend in bank stocks has been upward since last summer, and, just to comment in a general way, bank shares have their seasons. They are sometimes quite stylish and sometimes not so stylish. The stylishness of bank stocks has always been strong in periods of expansive Federal Reserve policies. Bank stocks had quite a market during the war years under inflationary financing. Bank stocks were out of fashion just after the eighth war loan drive, paralleling the restrictive deflationary phase of postwar Treasury financing, and bank stocks came

into favor again last summer when the restrictions affecting credit and availability of deposits for loans and investments were eased. There is a considerable psychological effect upon the thinking in the banks from Federal policies, and directors of banks who sit on so many boards and financial institutions that invest in bank shares reflect that psychology. Bankers somehow or other always have a worn and harried look when they have to meet higher reserve requirements. That atmosphere of pressure which originates in the banks spreads outside very rapidly and indirectly affects the price of bank shares.

I would say this, that the outlook for bank earnings in 1950, which is what we are primarily interested in, depends on whether the balance of the many factors to be considered is favorable. Mr. Norris Johnson has indicated stable totals, possibly higher totals, also possibly somewhat higher loan volume toward the end of the year, and certainly higher security totals with the financing of deficits. A number of things are entering the picture. One is the hope, the possibility, of a reduction in FDIC assessments. The banks in this area paid \$17 million, or thereabouts in FDIC premiums. Again, I'm just taking a figure: suppose that the assessment is reduced in half, or some figure discussed near that mark. It would mean that the banks in New York would accrue and pay an assessment of only \$8½ million, and, after allowing for the tax liability on the saving, the additional earnings would be \$5,100,000 which would be available for dividends and reserves. Now, the \$5,100,000, if that had been in effect last year, would have increased the net current operating earnings from \$135 million to \$140 million. It would have raised the earning rate from 5¾ to almost 6%; and so, here is one positive factor if it materializes.

Against that is the long-range adverse factor: namely, that depositors, large depositors, small depositors, individuals, corporations, national corporations will surely increase their balances with banks outside New York. If Woolworth has deposits in New York banks and sees fit to increase its balances throughout the localities in which it operates, it will naturally draw on some of the balances in its present depositories in New York.

Now, we should not overlook the possibility of a higher corporate tax. The corporate tax today, Federal, combined is 38%, and, if we raise the rate to 40 or 42%, we would have to apply the additional percentage points in full to the income these banks had last year before taxes. Their net current operating income last year subject to taxes was \$200 million, and the tax liability of \$65 million or thereabouts represented a tax rate of 32.3%, an effective tax rate of 32.3% applicable to that income. So you have to reckon with these two points. Apart from these possibilities, I would say that, based on whatever little we can see or hear or find out in the first two months of this year, earnings are running about 2 or 3% ahead of last year. The reason is that a year ago required reserves were high; today reserves are lower, and there are larger holdings of bonds. Rates have held.

I would like to answer your question by saying that bank earnings in 1950 should be better than in 1949 for another reason: the poor earnings rate in New York is coming to

the surface. As conditions enter the hopper on one end which prevent banks from earning enough, we find that we have got dead banks at the other end. Such a situation creates its own cure not only by the law of the jungle but also because people in responsible positions, monetary authorities, congressional committees, the Treasury, become increasingly alerted to the weaknesses of a situation in which we find banks not earning enough in a period of high activity with prosperity at flood tide. The problem, therefore, is likely to receive more serious consideration when policies and decisions are laid down by the Treasury and the Federal Reserve System.

Question: Can you see the prospect of a change in this intense competitive situation among the banks here in town other than this gradual process of acquisition and cutting down on a few of the smaller banks that you spoke of earlier?

Mr. Schapiro: Of course, banks competing with one another is what we all want. I think that bankers themselves have to become more conscious of the effects of their policies and decisions on earnings. When you speak to one banker, he tells you, "If we don't get the business, we won't have anything, and I will take a half loaf if I can't get a whole loaf." He will blame all his troubles on all the other banks in town, and the next banker does the same thing. It is pretty bad. I think, taking the long range, that non-bank sources will always be in funds and will compete with banks for loans; this means that those banks that engage in large lending operations will, of course, continue to do so, but, no matter how hard they try to get better rates, the decision will remain with the borrower. On the one hand, he has a loan available from a bank at a stated rate, short term, but he can be accommodated for very little more money on a long-term basis with a nonbank. Thus, the bank will always be in competition with the insurance company as far as the requirements of important borrowers are concerned.

The answer really lies in the direction of a broader diversification in the use of bank capital. Banks that confine their operations exclusively to large-scale lending, banks of big business, those not engaged in broad contact with the public and the business world, not serving the little fellow, handicap themselves and will not be able to earn enough as we see it today.

Many of these banks are overcapitalized with respect to the earnings they are able to secure on their present limited operations. They have the choice of either reducing their capital or finding new outlets. To reduce their capital is a serious decision and limits their competitive position among the banks in making loans to large borrowers where the existence of capital is important. A large borrower like CIT or GMAC doesn't care whether it borrows from a large Wall Street bank doing exclusively a Wall Street business or whether it borrows from a large Wall Street bank engaged not only in big business but also in a much larger field of operation through its branches. The solution really lies in the fact that those who have the capital and are not utilizing it must find broader channels.

Question: Doesn't this present situation affecting the New York banks illustrate a fundamental principle in in-

vesting which is common to industry generally? In other words, you have a trend here which seems to be adverse to the New York banks, and we had the same situation affecting the railroad industry. You have had your railroads operating in mature sections of the country that have lost ground to sections that have had the growth. The question arises here of the outlook for banking opportunities in New York City as against the outlook for banking in other sections of the country. Doesn't it come right down to that?

Mr. Schapiro: You are quite right.

Question: Then, there is another factor. A chap at the railroad meeting this morning said environment plus management makes the railroad. I think that can be applied to the banking industry. We know that there are banks operating in competitive areas that do a damned good job, whereas there are banks with managements that are mediocre that are just asleep and will continue to sleep. I would like to hear you express yourself a little bit more on the influence of management in the earning possibilities of banks.

Mr. Schapiro: The example we have to illustrate what you have said is right here in New York. The fact is that some banks in this city, because of management decisions and management enterprise, have kept pace with change and have gone out and won the business. We know of two banks in New York both of which have a like amount of deposits, about \$2¼ billion. One bank is a bank of big business, a Wall Street bank; the other bank, too, is a bank of big business in Wall Street, but it is also a bank of little business and carries on an operation with 80 branches. The earnings of the first bank are running approximately 4½% of stockholders' funds, while the earnings of the second bank are around 8%. The ability of the better earner to perform and continue to grow is an illustration of what you said. The first bank has stood pat, has engaged in this jungle business exclusively. It is a bank of big business. The second bank is a bank of both big and little business. It has been forward looking, is always introducing new methods and new services with profit to itself and its depositors, so that performance depends on the decisions of management. If a bank does nothing and stands still as this first bank did, that, too, is a decision, and its management is charged with the result. This bank is one of those Wall Street banks whose total loss of position in the Clearing House was 14 percentage points since before the war. The second bank is in the group of other banks that gained the 14 percentage points, or \$3 billion of deposits, and its success was due partly to the character of its business before the war and definitely to the decisions it made from day to day. If you stand still, you wither, because the others are out to get the business, and the same thing holds true in other cities. I think, Barney, you may have better figures than I have at the moment, but I am going to cite from memory. In Chicago, one of the Loop banks is earning nearly 50 or 60% more than a competitor Loop bank in the same area, and again it is a question of policies and management.

Would you like to amplify more on what you had to say, Barney?

Mr. Flaxman: The only thing is this—in looking at the

outlook of banking profits as such, you just can't generalize, that you have to take into consideration opportunities as presented by favorable growth trends. There is no reason why one should be wedded to a stock investment in New York City or Chicago or Boston or Philadelphia if the opportunities for the growth in the banking business are not favorable to those geographical sections. It is true that many other problems are presented for an investment medium, but it seems to me that a fundamental problem here faces an analyst, the same fundamental problem you would find in a textile industry or the public utility industry or any other industry, that, if capital cannot be profitably employed, then some drastic steps and measures have to be taken. One may be in the field of mergers with elimination of bank capital in order to permit the earning capacity at a high rate per dollar of capital to be realized, and, if that is the economic solution, I would say—let's have more of it.

Mr. Schapiro: The question really goes along this path—do we as analysts tell our clients to buy or hold bank stocks of New York, or should they invest elsewhere? In the last fifteen years it is plain that, if you had held bank stocks outside of New York, you would have done very much better than in New York. A fact that many find hard to believe is that a number of our New York bank stocks are quoted today at, or even lower than, the quotations for those very shares during the Banking Holiday in 1933. This fact has been a serious matter to stockholders of these banks who have seen everything else do better. Of course, there are some bank stocks, a good number of them here in New York, whose record has been very good. I think that time is helping answer the question of whether or not bankers can continue to hold investment capital without providing the necessary earnings, and that answer has already come and is in the process of coming from day to day. The pressure on bank earnings today is intensifying. Banks here in New York, at least many of them, find themselves with large holdings of securities on which the rate of income is greater than the rate of income obtainable today on new investments. These banks have large capital and on analysis do not compare favorably with others. Their stockholders are alerted to the competitive situation. They see the possibilities of a market for banks far in excess of the market for the pieces of paper. The situation is becoming evident to people in the banks as well as to those outside the banks. I would venture the opinion, Barney, that the corrective process is being accelerated and that decisions of major consequence affecting the number and position of operating banks in New York are in the immediate offing. The developments here in New York have arrested the attention of bankers all over the country who see the banks in this jungle business and the solutions that are evolving and who undoubtedly are beginning to learn the lessons of it so that the corrective process in New York carries with it applications throughout the country. Your comment about the greater attractiveness of banks in areas outside of New York where the growth factor is stronger is receiving increasing attention by investors, private and institutional.

Question: I would like Mr. Schapiro to comment on this. It seems generally agreed that the banks are not earning a sufficient rate of return. At the same time, New York

banks have the best capital ratios, ten to one as against sixteen to one, and yet the stockholders, possibly against their will, are being forced to reinvest a portion of the earnings back into capital which is not profitable, that is, by retaining 35, 40, 50% of earnings instead of paying it out.

Mr. Schapiro: The question you ask was posed actively among all the bankers last year, particularly in the third quarter. "Why build up more capital funds, why retain earnings and add to capital funds at a time when we are not using all our capital?" The disposition has been to pay out a larger percentage of earnings in banks whose deposit-capital ratios are low, and those decisions, too, are a reflection of the internal realization that, when their stocks are at a discount, their stockholders are discontented. The elimination of five banks has stimulated a great deal of self-searching among the surviving bankers. They have become ever so sensitive about the price of their shares, and those banks which, because of their low deposit-capital ratio or excess capital, could do so have increased the percentage paid out. The increase in dividends last year, or even right now, is not a reflection of improved earning power, and your point is very good.

Question: Is there any objection on the part of the state regulatory authorities or the Federal authorities to increasing those dividends, do you know?

Mr. Schapiro: No, the report of examinations of the State Banking Department and the National agencies contains a comment of the adequacy of capital whenever necessary, and, if there is no comment, bankers have just taken it for granted that they are free to pay more. One of the things I would like to mention which has not been brought out is that there is pending now in the Massachusetts legislature a bill that would permit the savings banks in Massachusetts to invest in shares of banks outside their state, particularly in New York and in certain other cities. Right now the savings banks in Massachusetts do invest in shares of banks in Massachusetts. If they are given this scope, it will be somewhat parallel to the freedom that savings banks in the State of Connecticut have had for a great many years. The effect of this legislation is enacted would be to broaden the market for New York bank stocks. It also raises the question whether the State of New York Banking Department and the State Insurance Department ought not to study the situation to allow savings banks and life insurance companies in New York State to invest in bank shares with such limitations as are wise.

Our friend asked the question about bank stock prices having gone up since the first of the year. This has been one of the factors; that is, the anticipation by the market of the enactment of the proposal in the State of Massachusetts.

Question: Can't the big, wholesale banks, without any branches, make a case on their side with a certain amount of propriety? In other words, the retail banks during a period of expanding economy made a lot of small loans at high rates. Now, then, if the worm should turn, if you should see a period of declining business, the bad loss risk might come home to roost on some of these small loans. Their bad loss experience might be much worse than the so-called wholesale credit, and I think it is true, too, that a

good many of those wholesale bank credits have rather short maturities, especially in their Government bond accounts, so that, if they needed more earnings, couldn't they stretch their maturities slightly? And haven't some of them been rather favored in the last two years, when we saw short-term rates go up from $\frac{3}{8}$ of 1% to about where it is now? I think that would mean a big boost to the earnings of a bank that has stuck to a quite short Government bond account. Another thing about the bigger banks not having many branches is they don't have the overhead expense, and, in case of a depression, that might be of some help, might it not?

Mr. Schapiro: You have raised problems that I think the leading banks downtown are now wrestling with. There is one comment you made that I think might not be substantiated by the facts. The loss experience of banks due to loans is not necessarily in favor of wholesale credits as against loans made to little people. A banker here in New York showed me figures that indicated that the average loss experience on small loans to individuals in small business was less than $\frac{1}{4}$ of 1% for nearly a twenty-five-year period, this in a large bank in New York doing retail business. In an industrial bank in a city outside New York, figures that I have seen going back to 1917 showed a net loss ratio for the entire period of even less than the $\frac{1}{4}$ %. I cite two cases.

The loss experience due to loans in the New York area—I don't have the figures before me, but my impression is that it is considerably in excess of these two cases—does not substantiate the desirability of wholesale credits few in number against the retail business of many small loans. The loss experience of banks in New York since 1945 shows that their losses have come predominately from the larger loan and less from the smaller loan. Although this period has been one of high employment, there is no basis for concluding that the experience will be different in a period of recession. Policy in making loans, particularly in determining the credit worthiness of the borrower is still the all-important factor in the loss experience of banks.

Of course, banks with large capital may acquire branches that service small business, individuals, and small accounts without endangering their situation since they have enough capital. The questions of policies and management are still operative, however. They are operative in big business banks and operative in little business banks.

Question: I would just like Mr. Schapiro to comment, against the background of this meeting, about the outlook for bank stock prices.

Mr. Schapiro: On price-earnings ratio the market is not low. If we assume a book value of 100 for the total capital accounts here in New York, last year's earnings were \$5.75, 53 $\frac{3}{4}$ %, and we think they will be higher. The market which is at a discount today of about 16% would set the price at 84, and 84 times last year's earnings of \$5.75 gives a price-earnings ratio of 15 or thereabouts. Since the trend of earnings seems to be rising, the outlook is hopeful.

The more important question is, then, what effect will the merger trend have on the earnings of surviving banks? Cash mergers will release the capital of retiring banks; the deposit-capital ratio of those banks that remain will immediately increase. Since their own capital account will not change except for such premiums as they might have to pay, their rate of earnings will surely rise.

For example, if a bank has a deposit ratio of 5 to 1 and acquires another bank, doubling its deposits while its capital remains the same, the ratio becomes 10 to 1. The increased earnings may readily be estimated.

The market for bank shares reflects today the market for banks, and the prices of bank stocks reflect the increased sensitivity of stockholders to the existence of such a market. Prices will rise. Shares of retiring banks will command a price at least equal to their book value. Shares of surviving banks will rise, reflecting the improved earnings resulting from the increased deposits and business they will inherit.

Question: Would you like to comment on the statement that a prominent professor of economics in New York made about a month ago?

Mr. Schapiro: I assume you are talking about Dr. Nadler. His statement has certainly much to support it on the basis of what we know today. The price-earnings ratio is not low, but the earning trend is higher, and we have here in New York a bit of jungle business which is being worked out partly by this process, but more importantly by forward looking managements and by understanding monetary authorities. I would like to be counted on Dr. Nadler's side, if I can say that in answer to your question.

Chairman Greene: Gentlemen, the meeting is drawing to its close. Would you like to give a rising vote of thanks to Morris Schapiro and to Norris Johnson?

(The audience arose and applauded.)

* * *

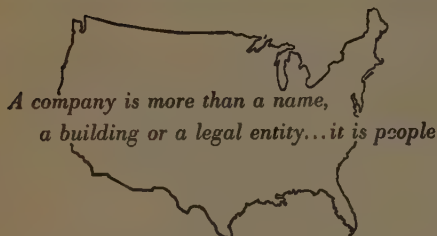
1824—March 30-31 . . . Henry Clay made speech supporting the protection of American industries.

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Sincerely,

PRESIDENT

Balance Sheet

December 31, 1949

ADMITTED ASSETS

	*DECEMBER 31, 1949
Cash in Office, Banks and Trust Companies	\$ 35,561,204.01
United States Government Bonds	110,418,558.10
Other Bonds and Stocks	143,358,542.85
Investment in The Home Indemnity Company	7,690,736.20
First Mortgage Loans	3,017.83
Real Estate	4,477,325.36
Agents' Balances, Less Than 90 Days Due	14,370,413.65
Reinsurance Recoverable on Paid Losses	374,237.35
Other Admitted Assets	1,891,094.14
Total Admitted Assets	<u>\$318,145,129.49</u>

LIABILITIES

Reserve for Unearned Premiums	\$146,128,831.00
Reserve for Losses	30,890,845.00
Reserve for Taxes	13,900,000.00
Liabilities Under Contracts with War Shipping Administration	1,608,917.08
Reinsurance Reserves	1,191,579.00
Other Liabilities	3,057,570.33
Total Liabilities Except Capital	<u>\$196,777,742.41</u>
Capital	\$ 20,000,000.00
Surplus	<u>101,367,387.08</u>
Surplus as Regards Policyholders	<u>121,367,387.08</u>
Total	<u>\$318,145,129.49</u>

*NOTES: Bonds carried at \$5,376,605.79 Amortized Value and Cash \$80,000.00 in the above balance sheet are deposited as required by law. All securities have been valued in accordance with the requirements of the National Association of Insurance Commissioners. Assets and Liabilities in Canada have been adjusted to the basis of the free rate of exchange. Based on December 31, 1949 market quotations for all bonds and stocks owned, the Total Admitted Assets would be increased to \$319,766,705.54 and the policyholders' surplus to \$122,988,963.13.

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Outlook for the Building Industry

THURSDAY AFTERNOON, MARCH 2, 1950

J. M. GALANIS, Shields & Company, New York, presiding.

Chairman Galanis: The first speaker on the program is a gentleman who got his training at the famous London School of Economics some two decades ago. Most of his time has been spent in the building industry or in allied lines. He is the gentleman who developed the so-called package mortgage, which has been used so successfully, I believe out at Levittown, by Levitt, who is today probably the world's largest builder of single-family houses. That package mortgage involves selling utilities—stoves, refrigerators, and so on—with the house as a package, and then you amortize it over twenty or twenty-five years.

For the last twenty years our first speaker has been with *The Architectural Forum* magazine, which, to my mind, is the outstanding publication in the building field. What they don't know about building isn't worth knowing. Mr. Goldman! (*Applause*)

* * *

Mr. Arthur Sworn Goldman: Construction forecasters have had a rather easy time of it of late. Demand has been good all along the line; there has been an easing of the supply of both materials and labor; price squeezes were not to be feared; and credit has been freer. The questions have revolved around detail, not aggregates. The Departments of Commerce and Labor forecast an increase in 1949 over 1948 of 6%. The Federal Works Agency, now the General Services Administration, forecast an increase of about 2%. The reported increase was a trifle under 3%. That was hitting it within a range of 3%, which is close enough for anyone.

PESSIMISM IN THE AIR

There is more pessimism in the air this year, but not much. Commerce and labor are predicting no appreciable change in '50 from '49; the GSA is forecasting a drop of not over 2%. The Council of Economic Advisers, if we may trust an article written by one of their staff, seems to believe that the figure this year will be within about 3%, plus or minus, of last year. The fact that the statement is plus or minus, not minus, as is the GSA figure, suggests that all analysts are not willing to be quoted as even certain of a modicum of pessimism.

These forecasts have to assume, of course, that John L. is taken care of, and that other significant catastrophes are handled in time. Sometimes I think John L. is the guardian angel of forecasters. If things go wrong we can always say that our forecast specifically excluded any estimate of what would happen if he began to frown; he frowned, so all bets are off. So, he has his good points after all. Waiving John, then why are the prospects so good for construction? The reasons may be classified into at least five groups: (1) backlogs, (2) price adjustment, (3) availability of funds, (4) Government support, and (5) the excellent start.

The backlogs are good across the board. They are good, I believe, even in industrial and commercial construction. New developments in handling goods, as well as in producing them, have made it possible to achieve marked economies with better layouts of machinery. This means a somewhat larger ratio of plant to machinery expenditure. An increase in industrial construction outlays seems possible, even should total expenditures on plants decline somewhat.

ORDERS HAVE BEEN RISING

And you may have noticed recently that orders for machinery and equipment have been rising. The preliminary new order index of the National Machine Tool Builders Association for January 1950 was approximately 95, compared with 82.5 in December, and a low last summer of 48. An increase of this magnitude for one month is not conclusive, but the fact that the curve is still upward is significant. Although the data are crude, the seasonally adjusted figure for industrial contracts awarded seems also to be turning up. Studies published by the Department of Commerce indicate a sizable backlog in commercial construction. This curve is not yet rising, but there would seem to be considerable reason to believe that it may.

UTILITY CONSTRUCTION MAY DROP

Utility construction may drop some but not sharply. Farm construction does not seem to be dropping much. The figures here are not good, but the Department of Agriculture people report the demand for structures in which to house new equipment and the increased interest in better farm housing are causing the market for farm construction to hold up better than the market for farm equipment. All in all, then, the private nonresidential construction market for 1950 does not seem much smaller than was the 1949 market.

RESIDENTIAL MARKET SEEMS GOOD

The private residential market seems good also. It seems good through 1950, despite the fact that family formation is dropping and will be less than half of what it was in 1947 and possibly about only half of what it was in 1948. The market will continue good for several reasons. First, there is *momentum*. Production usually continues somewhat longer than an exact accounting would suggest. Second, we still have to *create a normal supply of vacancies*. That alone would take a year's construction with family formation at current levels. Third, there are *large particular demands*, such as demands for Negro housing. One builder I know is building several thousand houses for Negroes and selling them faster than he can build. Others will find this market, as they belatedly discovered the Section 608 market. Fourth, the shift in the size of families, and in incomes, is creating a rehousing market. Families who bought one- and two-bedroom houses are outgrowing them. The number of births in 1949 exceeded that in 1948. The

number of families with two children is growing faster than it was a year ago, or than it was even in 1947. Fifth, there is a huge *backlog of commitments* for 608's. This backlog, plus housing for military personnel, could result in a volume of construction of multifamily and rental types of nearly 100,000 more than the 1949 volume. Considering the very high level at which residential construction started the year and the high level of contract awards reported through the first part of February, it would be surprising if single-family housing dropped by much more than 100,000. Private and public residential, then, seem headed for a high level in 1950.

BACKLOG OF DEMAND

The virtual suspension of nonmilitary public construction in 1940-46 created a huge backlog of demand, which has been aggravated by the increase in business activity. Increased business implies the need for more highways, more water supplies, and bigger sewer systems. Increased population demands more hospitals and more schools. We are still doing less highway construction than we were doing twenty years ago although traffic is double what it was twenty years ago and is increasing at over 4% a year. You are familiar with our failure to keep up with growing demands for water. Other cities have similar problems. The hospital insurance plans and other factors are creating demands for hospital construction which are over a third greater than current construction rates. The increase in the number of children will be three times what it was during the '29's, but we are reported to be building at only the level of 1925-29—not two or three times as much. For the next decade we should build at a rate at least a third, and possibly a half, more than we are building. This is an area in which the public will be insistent.

I do not need to elaborate further. The backlogs are obviously with us.

The second reason for being optimistic is the fact that price adjustments are being made to help bring supply and demand together. They are not being made in all categories nor with equal facility in all areas. It is true that published indexes do not show much of a drop, and some of late have been going up. But these indexes find it hard to allow for intangibles such as greater efficiency of management and of labor, smaller allowances for disappearing contingencies, and smaller markups.

Let's take one specific case. The price of steel has been rising. All the indexes show that. Yet the Bureau of Public Roads reports that the price of reinforcing steel and structural steel installed on the highway job has been dropping. Reinforcing steel installed cost an average of 11.6 cents a pound in the fourth quarter of 1948, 11.3 cents in the first quarter of 1949, and dropped in each quarter thereafter, reaching 9.8 cents in the last quarter. Structural steel installed dropped from 16.9 cents in the last quarter of 1948 to 13.4 cents in the last quarter of 1949.

COST OF HIGHWAY CONSTRUCTION DROPPED

The cost of highway construction is reported by the same authority as having dropped by 12% during the year, with a decline registered in each quarter. Some areas are having more difficulty in making price and cost adjustments. But

design changes, changes in management and labor practices, changes in specifications, and more experience are helping cut costs and prices where the market demands it. This helps hold up volume.

The third reason for optimism, availability of funds, does not need explanation. There are areas in which credit is hard to secure. Small firms have difficulty in getting money. But even the stock market is easing, and Government support to credit is expanding.

GOVERNMENT SUPPORT TO CONSTRUCTION

The fourth reason, Government support to construction, also needs little elaboration. Title 608 is one obvious illustration. The proposed amendments to title 2 which will ease regulations on suburban housing is another. The proposed middle income housing innovations is a third. The Government now underwrites about a half of residential construction which accounts for a third of all construction. In addition, it builds a third of total construction; that is, public works represents a half of nonresidential construction. It therefore supports directly one half of all construction and is vitally concerned that a large part of the half which it does not directly support will be sustained.

The last reason mentioned for being optimistic about 1950 is the high level at which the year began. Contract awards in January were 50% above the figure for January 1949, and the contracts for the first half of February were 28% above the figure for the comparable period in 1949. The figure for the first half of February was 22% above the figure for the first half of January. In other words, the year started at high levels and has shown no sign of a drop. With contracts off to such a start, activity will continue at a high level for several months. Contracts will have to drop soon if activity for the year is to be sizably below 1949.

LABOR PRODUCTIVITY BELOW PREWAR

There are other sides to the picture. Labor productivity is still below prewar, but labor expects to continue to get greater wages. Some material prices such as lumber and metals are high and probably will stay high. Any uncertainty as to the future could cause a sharp decline in commitments. Difficulties in adjusting to the new housing market could cause trouble as it did at the end of 1948. At the moment these factors seem to have less weight than those that are supporting the market this year.

One other factor might be mentioned. There is a common belief among economists that building runs in long-term regularly recurring cycles. Dr. Long's series, for instance, showed five building cycles since the Civil War—one ending about 1878, one about 1888, one about 1900, one about 1918, and one about 1932. Riggelman's figures suggest one wave ending in 1878, one in the latter half of the '90's, one about 1918, and one about 1932.

It could follow that another nadir in the construction cycle might be coming soon. It may have been postponed by the last war, and as a result it may be even more severe when it does come. The Committee for Economic Development, in connection with its work on stabilizing the economy, is expecting to publish a report on construction which includes a judgment to the effect that the long-term regularly recurring cycles may not exist.

It finds that the evidence cited in the Riggelman series particularly appears to lose its validity when examined closely. For example, both the Riggelman and Long series show a cycle ending in 1918. The Government figures show 1918 a very good construction year. The two series show a much greater increase than do the Government series from 1920 to 1925 and a much greater decline thereafter. In other words when we are able to make some analysis of the data from 1915 to 1932, the story does not appear to be what the earlier figures suggest. The reasons are many: inadequate data from too few areas, no adjustment for relations of permits to activity or to actual price, little breakdown by type of structure, no allowance for nonbuilding activity, poor weightings due to poor data, and so on. The one conclusion the report suggests, however, is that there is a cycle following major wars, but no definite cycle of sizable proportion proven at other times.

ANOTHER DOWNWARD SWING IMMINENT

That, of course, could lead to the conclusion that we may have another downward swing starting ten years more or less after the end of the last war. That is still several years off, but the study indicates that even this is not inevitable under the changed conditions we face as compared with the relatively *laissez faire* conditions of the '70's and '20's and the greater importance of public and utility construction, plus the public support of residential building.

I should like to end on a note of cautious optimism. The public and the Government will not permit another catastrophe such as we had in 1932. The construction industry therefore will not be faced with such difficulties as it had to meet twenty years ago. In addition, it is better informed and better organized. It knows it must cut costs. It is just entering on a period of technological improvements and is, therefore, in a better position to cut costs than it was twenty years ago. Adjustments must be made in area after area, but the adjustments need not come all at once. Industrial construction dropped in 1948 while residential rose; residential might drop in 1951 while industrial rises. I for one believe the industry can make the adjustments and continue to build at a slowly and regularly increasing pace. (*Applause*)

Chairman Galanis: The Government has played an increasing role in building during the last fifteen years or so, and that role, instead of diminishing, promises to increase. I got in touch with the top authorities in Washington to get a speaker to discuss the public housing program. I don't know too much about it myself, and I suspect a lot of others are in the same boat. It is something new, and it looks as if it will be pretty big. We don't know how big. There are a lot of misconceptions and fallacies as to who is going to pay for it, and there are a lot of loose words bandied about that it is socialization and what not. Mr. Foley, the top FHA administrator, first selected Mr. Abraham Miller, assistant general counsel, but he couldn't make it, and his choice was the gentleman who will talk to us next, who Mr. Miller said was just as well qualified as he was. So, I figure that we have got about the best representation possible from the Public Housing Administration.

Our next speaker is a law school graduate from New York University. He has lectured there and has spent most of the past ten or twelve years in this type of thing. He was with the original U. S. Housing Authority under the Act of 1937, and now he is chief counselor for the New York office of the Public Housing Administration, which is, of course, the largest branch of the Administration. Mr. Herman Hillman! (*Applause*)

* * *

Mr. Herman D. Hillman: Mr. Chairman, ladies and gentlemen: I hope you will forgive me if I speak to you informally. Mr. Miller, who is my colleague in Washington, certainly regrets not having had the privilege of talking to you, but instead of him I have that pleasure and privilege.

GOVERNMENT HAS PROFOUND EFFECT

There is no question, as Mr. Goldman pointed out to you, that the impact of Government in the building and construction industry during the next ten years, at least, will have a profound effect. My topic here today is the financing of public housing. However, before I go into the technical phases of that, in which I am primarily interested and primarily concerned, I would like to tell you briefly about the background of the legislation which has inaugurated and established this huge program of construction. This act is known as the Housing Act of 1949, and it was signed by the President July 15 of last year. It is a multi-titled act. It has six separate titles for six separate subjects. Only one of those titles has to do with public housing, with which I am concerned in my daily work. However, each title, within the major purpose and policy of the act, is designed not only to affect neighborhood and living environments for families in the United States, but also to stabilize the building and construction industry at a high level of production each year.

Now, I will tell you briefly that there is a housing research title, but I won't dwell on that. The purpose of it is that, within the Housing and Home Finance Agency, under the direction of Mr. Foley, a research unit will be set up to study ways and means of bringing down costs in the building and construction industry and of making the cost of housing cheaper to each occupant or tenant, as the case may be, depending on the section of the country where the housing is being provided.

EXPERIMENT WITH NEW TYPES

This organization will experiment with new types of construction and new types of materials; it will not only have its own research facilities, but it is also authorized to contract with universities and experimental organizations throughout the country, so that laboratory techniques may be developed and assembled in one place, from which the Housing and Home Finance Agency will distribute this material and make it available to the public—both to public housing agencies and to private agencies.

FARM HOUSING TITLE

There is also a farm housing title, which is under the administration of the Department of Agriculture. The Secretary of Agriculture is authorized to make loans to farmers

for the purpose of improving the housing and residential facilities on farms, with the over-all objective of thereby improving the production and the utility of farmers, on the theory that the living conditions of a farmer have to do materially with the production capacity of a farm.

Now, this brings us to the two titles that I believe you will be primarily interested in this afternoon. Title 1 has to do with urban redevelopment, and title 3 with low-rent public housing. Now, these two titles in due course will run along parallel lines, and their interests will merge, depending on redevelopment plans in any given community.

For the purpose of definition, let me tell you that Title 1, known as the slum clearance or urban redevelopment title, has to do with the clearance—the assemblage and clearance—of slums and blighted areas in major cities. Well, I shouldn't use the term "major cities," because it applies to all cities where those conditions exist, regardless of the size of the city, but, of course, obviously, the impact will be greatest in the use of the title 1 resources in congested, urban areas, such as New York, or other large cities.

Now, the purpose of title 1 is not construction. There will not be any new construction financed by the resources made available under title 1, but the impact on the building and construction industry will be tremendous, because it will open up new sights and new approaches for the purpose of construction.

Briefly, this is the way it will work: The Housing and Home Finance Agency, with Mr. Foley the head, has organized an urban redevelopment division, under the direction of Mr. Nathaniel Keith, and they are authorized to make loans to local public agencies. Now, these local public agencies may be municipalities or agencies created under state law by using the authority device to carry out the functions of urban redevelopment. Loans will be made to these local public agencies for the purpose of assembling and acquiring and clearing congested urban areas, which are blighted or in a slum condition. After the area has been prepared for re-use, then the local public agency may, in accordance with the redevelopment plan which has been formulated locally by the municipality, in accordance with the master plan of the municipality, dispose of this land for development, for construction, for re-use.

The important thing in this process of assemblage and preparation for re-use is that the local public agency will be authorized to convey this land for re-use in accordance with the redevelopment plan at an economic price, which is consistent with the re-use purpose of the land and which will not necessarily reflect the capital cost of bringing this project to that point of re-use. This, of course, entails a loss of funds as between the acquisition costs and the preparation costs and whatever the resale price may be. This difference in money will be subscribed to by the Federal Government, the Housing and Home Finance Agency, to the extent of two thirds of this loss, and to the extent of one third of it the municipality will have to either put up cash or services or facilities for the redevelopment project to carry that one-third share.

SLUM A BARRIER TO DEVELOPMENT

The slum has been perpetuated because the cost of acquisition, clearance, and preparation for redevelopment has

always been so high as to make it a bad business risk for any private owner or buyer. So, the slum, in effect, has been a physical barrier to the development of urban areas, much as a river would be, or a mountain. It has hemmed in the normal development of a municipality in its best interests. That is apparent on its face.

EXTENT OF PROGRAM

Now, what are the financial resources available, and what is the extent of this program? It is a five-year program, and, for loan funds, Congress has authorized the sum of \$1 billion to be expended over a period of five years. Those loan funds, of course, will be repaid. The loans will be made at the Federal going rate of interest to local public agencies and will be repaid over a course of years. The course of years will be a maximum of forty years. For this write-down, for this sharing of two thirds and one third that I mentioned, there is a fund of \$500 million authorized by the Congress to be expended for these redevelopment projects over a period of five years.

Now, that is the extent of the financial participation of the Federal Government and of the municipalities. When these projects are ready for redevelopment, they may be redeveloped, as I said, in accordance with the approved redevelopment plan. Now, that redevelopment plan does not necessarily mean public construction. It may be construction for the purpose of a commercial area, which will extend an existing commercial area that has become congested and has not been allowed to spread because of the existence of the slum, or it may be for residential use. It may be that a public housing project might go in, or a 608, or what have you, depending on the physical characteristics of the particular city.

LOW RENT HOUSING TITLE

Now, title 3 is the low rent housing title. That title, unlike the other titles of this act of 1949, is not a new undertaking. It is not a new program. It is in the form of an amendment to the U. S. Housing Act of 1937, which inaugurated in 1937 the Federal-local relationships that resulted in the housing projects that have been constructed and are in use today.

The size of the program for residential construction by local housing authorities, which are local bodies created by state law, is 810,000 units to be constructed over a period of six years, beginning July 1, 1949. Those 810,000 units average 135,000 units per year for a period of six years. The President has power under this act to accelerate this program or decelerate it, depending on the condition of the building and construction industry and depending on the advice of his Council of Economic Advisers, which ties in with what the first speaker told you about the influence of Government in this respect on the building and construction industry.

Presumably, if the level of construction has fallen down, the President might, to stimulate the economics of the country, increase the program within certain limits, or, conversely, if the economic advice is that the public housing program is too large for the needs in any particular year, then the President will lessen the number of units that may be authorized to be built in any one year during this six-

year period. However, the over-all amount is 810,000 units over this period of six years.

135,000 UNITS A YEAR AVERAGE

Now, 135,000 units a year is the average which compares with the possibility of the nation's capacity for residential construction of approximately 1 million units a year. Thus we see that in no one year will the participation of public housing be more than slightly over 10% of the total possible volume of residential construction in the country.

That brings me to the subject of the financing of these housing projects. As I told you, the role of the Public Housing Administration, which will be the agency administering the Federal part of this program, is that of the banker, the agency that extends the credit. Now, the credit that the Public Housing Administration will extend is in two forms: loans and annual contributions.

PURPOSE OF ANNUAL CONTRIBUTIONS

The purpose of the annual contributions is to affect the rent which a housing authority, as the landlord in the local community, will be able to charge its tenants who live in these housing projects. In other words, it will be a cash subsidy, which will bridge the gap between an economic and a social rent, as the case may be in each particular locality. But the annual contributions are an important factor in the financing of any housing project, because the annual contributions, which are the subject of a contract between the Public Housing Administration and the local housing authorities, and in support of which the Congress of the United States has pledged the full faith and credit of the United States to the payment of these annual contributions, are pledged for the benefit of bondholders of the local housing authority.

In other words, the local housing authority issues its bonds, its own obligations, on the open market and pledges not only its revenues, but also these annual contributions for the benefit and protection of bondholders.

AMOUNT OF ANNUAL CONTRIBUTIONS

Now, the amount of the annual contribution under the statute will not be less than $4\frac{1}{2}\%$ of the development cost of any particular project, and the maturity of the serial bonds that will be issued by local housing authorities will have a maximum maturity of forty years, so that for forty years a $4\frac{1}{2}\%$ annual contribution will be available to the housing authority and will be a fund pledged for the protection of bondholders.

Now, the amount of the contribution, because of calculations by statisticians and economists, will equal full coverage of all debt service of the local housing authority. Therefore, the bondholder will have a pledge of an annual contribution which is backed up by the full faith and credit of the United States, which is equal in any event to full debt service—amortization on interest over a period of forty years.

NATURE OF BOND NOT NEW

Now, the nature of the bond that the housing authority will issue is not new to the bond market. This bond is a type of bond that developed subsequent to the year 1937,

and, as many of you probably know, it has enjoyed a great deal of success in the investment market, because it is a tax-exempt bond and has almost an absolute guarantee. Now, I use the word "guarantee" not in the technical, legal sense, but the arrangements by which the annual contributions are pledged are such as to be almost a guarantee of the face of the bond by the Federal Government.

SECURITIES ARE REVENUE BONDS

Now, the securities themselves are in the nature of revenue bonds. They are in a sense subsidized revenue bonds, because of the impact of the annual contribution, and they are issued by local housing authorities and sold after public advertisement pursuant to the requirements of state law, where the state law is applicable to such public sales, and, as a matter of policy, all housing authorities sell their bonds by public competition rather than by private contract, even though the state law does not require it.

SOLD BY HOUSING AUTHORITY

The bonds are sold by the housing authority, as I said, on the open market, and, therefore, insofar as capital funds are concerned, private funds and not public funds will be financing the capital cost of these housing projects.

Now, under the old act of 1937, the housing authorities were not able to sell 100% of the capital cost of their projects in the form of these local housing authority bonds, for various reasons. They averaged something like 30 or 40% of the development cost of the project by sale to the investors on the open market. The rest of the bonds were taken by the U. S. Housing Authority in the old program and will be taken, if necessary, now by the Public Housing Administration.

STRENGTH AND SECURITY FEATURES INTRODUCED

However, under this new act of 1949, strength and security features have been introduced. So the belief is now shared not only by public officials, but also by investment bankers on Wall Street and elsewhere that housing authorities will be able to sell at least 100% of their capital costs of construction through the sale of these local housing authority bonds, for this reason: Under the former act, the Federal agency was required to stop the payment of annual contributions to a local housing authority on the happening of a substantial default, which amounted to a diversion of the project from the use intended under the act, or mismanagement — serious mismanagement — or defalcation of funds, and so forth. The bondholder then was confronted with a possibility that, if the housing authority did not meet its covenants and did not live up to its obligations, this primary security, the payment of the annual contributions mentioned for his benefit might be terminated or halted for a period of time, until the defect was cured.

This new act has a requirement that, in every contract between the Public Housing Administration and the local housing authority, on the happening of such a substantial defalcation, the local housing authority will be obligated either to deliver possession of the project to the Public Housing Administration or to convey title of the project to the Public Housing Administration. Now, with that provision in the contract, then the Public Housing Adminis-

tration is authorized to continue payment of the annual contribution which has been pledged for the benefit of bondholders, even during such periods of default. So, in effect, the bondholder now can say to himself that no contingency may happen that will impair the continuous payment of the annual contribution pledged for his benefit. This brings me back to what I mentioned earlier: an arrangement that amounts—although not technically—to a guarantee, as close to an absolute guarantee by the Federal Government of an obligation of a housing authority of a local public agency as is possible.

VOLUME OF BONDS WILL BE HUGE

The volume of bonds, of course, will be huge. The program, as I said, is 810,000 units. The average cost per unit will be something like \$4,800 throughout the country. That will be the magnitude of the program. A loan fund of \$1½ billion is authorized, but this will be a revolving fund to support the temporary financing of projects until they are ready to issue bonds, when the projects are completed.

The bonds will be issued under this present program at a time when the housing authority is almost ready to take occupancy of tenants. Timing, from this aspect, means that these bonds should hit the market some time, I should say, around the end of this year.

In addition to that, there is authorization under this act to refinance the existing bonds of the housing authorities, which were used to finance the 1937 program. That program was a sixty-year serial bond, as a maximum authorization, and with an annual contribution in a lesser percentage than the annual contribution available for this program, so that there will be a refunding operation under the new provisions of the 1949 act. Those bonds, I believe, will be issued possibly in the fall of this year.

THIRD CATEGORY OF BONDS

Then a third category of bonds will come to the market: bonds to refinance those projects that have continued in temporary financing because they were caught at a point during the war years when money had to be diverted for war and defense purposes, and so bonds were not issued for these projects, but the projects were kept under a system of temporary financing until the present time. Now, with the advantage of the new act, I expect that all these temporary financing obligations will be refinanced.

I have given you a bird's-eye view of the housing act of 1949 and the implications of its financing provisions. We are still on the threshold of the real impact of the program, because title 1 is still in its administrative, preparatory stage. Manifestly, there must be time to develop policies and procedures. Municipalities must have time to develop redevelopment plans in consonance with their master plans.

However, the title 3 program is under way. The first advertisement, I was informed today, for actual construction bids will go out in respect to the City of Bridgeport approximately March 15 of this year, and by August 1, as the President announced back in July of last year, as Mr. Foley has announced throughout the country, it is expected that a start will be made on 50,000 units of construction.

That is the program. Thank you very much for your attention. (*Applause*)

Chairman Galanis: There will be a chance for questions after the next speaker.

The final speaker is one of our own fellow analysts of the New York Society. He is a real, professional analyst, full time. He has no side line of selling razor blades or ladies' nylon hosiery. (*Laughter*) In my opinion, he is one of the best security analysts on the Atlantic Seaboard. That takes in a lot of territory, but I know what I'm talking about. He is one of the two fellows that know anything about building and building securities. (I am the other fellow.) (*Laughter*)

It gives me great pleasure to introduce my friend, Lyman S. Logan. (*Applause*)

* * *

Mr. Lyman S. Logan: It is nice of you to ask me back again this year, and I am glad to tell you what I can about the stocks in the building group. I am going to tell you what I think about these different stocks as precisely as I can, knowing full well that anybody who talks about any group of stocks ought to have enough common sense not to stick his neck out too far. In taking what I have to say, therefore, you must make your own reservations as to how positive you think a person ought to be.

As I have pointed out before, and as all of you know, there is no such thing as a homogenous group of stocks called the building stocks. They differ as to their sources of demand just as there are various types of building activities. A stock that depends for its demand on residential building is not the same kind of stock that depends on public works construction or public utilities construction, or the building of industrial plants. Some of these types of activity require steel, some cement, some bricks, some lumber, and some of them require all these things. They also require paint and roofing materials, but these building materials are largely used in maintenance work.

So it is necessary to arrange these stocks in the building group into several different subgroups. That is what I propose to do in talking about them.

FIVE OR SIX GROUPINGS

In analyzing these stocks, I have always made about five or six groupings: namely, the wallboard companies, the heating and plumbing companies, the roofing companies, the cement companies, the paint companies, and the lumber companies. If you would like to add some more, there are the pressure pipe companies and the air conditioning companies. I propose to talk about these as separate groups of companies because primarily their demand depends on different sets of factors. For example, it has been explained to you that the outlook for residential building is favorable certainly for the amount of residential building that is to be completed in the first six months of this year. There have been large enough increases in the contracts awarded in recent months to assure a good level of business for those companies that manufacture products that go into the residential type of construction.

In this group I would place primarily the wallboard companies and the heating and plumbing supply companies. The reason for it is that these are the materials that depend primarily for their demand on new residential con-

struction. (Residential construction takes about two thirds of total production.) In other words, when residential building is good, the demand for the products of these manufacturers is quite favorable, and their earnings are high. The wallboard companies I have in mind are such companies as U. S. Gypsum, National Gypsum, Masonite, and Celotex. These companies had a good volume of business in the first quarter of last year. The second quarter's business did not show the usual seasonal increase, but there was a substantial increase in the third and fourth quarters.

1950 EARNINGS SHOULD BE GOOD

According to my calculation, earnings for 1950 should be a little better than in 1949. U. S. Gypsum should earn about \$15 a share compared with \$13.51 in 1949. I would place National Gypsum's earnings at \$2.75 in 1950 against \$2.35 estimated last year. They ought to pay out \$1.50 as against \$1.25 in 1949. Masonite is a little different situation. About half its business goes into industrial fields. Last year it had a very long and a very costly strike. I think the earnings of this company ought to be about \$8.50 a share, compared with \$3.98 in the fiscal year ending August 1949. Last year's dividends in this company were rather low. Some of these times I would expect that the dividend would be raised. Perhaps they will start paying more before the end of this year. Operations of the new California plant should be reflected in the earnings of the company very shortly now.

I seldom do very much work on Celotex, and I hesitate to hazard a guess on this company as I don't follow it very closely.

For the plumbing and heating supply companies I would look for somewhat better earnings, but this is more particularly for companies in the plumbing supplies rather than heating. I believe that American Radiator could show earnings of as much as \$2 a share, against an estimated \$1.85 for 1949. You will remember that sales of this company made a very poor showing in the second quarter of 1949. Inventories on such items as bathtubs were substantially reduced, with the result that orders were considerably below the previous year's figures. Actually, I think that the sales of bathtubs for example in the first half of 1949 were considerably less than the number of bathtubs installed.

The same applies to all other kinds of plumbing fixtures. It seems to me that the sales of American Radiator should make a favorable showing for the second quarter of this year, compared to the second quarter of 1949. The improvement in earnings should be quite substantial in the first half of 1950, compared with the 59 cents shown in the first half of 1949.

Some other companies in this particular group may not do quite as well. I have in mind a company like Crane, which depends primarily on its heavy valve business and the installation of steel pipe. I think the decline in industrial building will considerably reduce this company's sales below the level of 1949. I would expect earnings to decline somewhat, say to about \$3 a share from an estimated \$4 for 1949.

Holland Furnace might also have a slight reduction in its earnings, but it might still run up to \$3.50 a share. Honey-

well has had a very favorable showing of \$6.01 in 1949, and it would be a little surprising if it kept up to that rate in 1950. American Radiator will probably increase its dividend somewhat, but I would expect a reduction in payments to be received from Crane. The other two probably ought to keep their dividends the same for 1949.

I mentioned previously the roofing materials group. In this group I include companies that produce a lot of other types of materials: specifically Certainreed, Flintkote, Ruberoid, and Paraffine Companies. I think some of these companies may have a reduction in their earnings for 1950. Oddly enough, I think they might have a better first quarter than they did in 1949, particularly as far as the tonnage of sales is concerned. However, the price situation there is one that can deteriorate considerably. My understanding is that it is already beginning to show this deterioration. The whole trouble with these companies is that their margins are so far above prewar levels and facilities for production of roofing materials have expanded so greatly. This always brings up the possibility of a considerable decline in margins, and, if there is any grouping of companies I like to stay away from, it is those that have margins far above prewar with possibility of price competition. There is some evidence that this competition is beginning to take hold.

Of course, in the calendar year of 1950 the Paraffine Company ought to earn more than the 85 cents recorded in calendar 1949. I understand the company has a lot of problems, and the need for cash has been so great that it was necessary to reduce the dividend. It probably is a very fine company from the longer-term point of view and the price of its stock is fairly well deflated, but I don't want to be too previous about jumping into this issue.

I have put down some tentative estimates for Flintkote and Ruberoid of \$3.50 for Flintkote against \$4.33 in 1949 and \$7.50 for Ruberoid against \$8.72, but I do not feel very confident about such earnings in the face of the price competition that is going on in this field at the present time. Certainreed is partly in the same boat, but this company has indicated that it expects about half its business in 1950 to be in gypsum products. As I have indicated previously, I think the outlook for gypsum products is quite favorable. This company is one that has business half of which I like and half of which I don't like. It probably can pay more in dividends in 1950 because it has its capitalization quite well cleaned up. This stock probably has a little more favorable outlook in 1950 than in 1949.

The outlook for the pressure pipe companies is not so good as it was this time a year ago. I am rather favorably inclined to Johns-Manville with its line of asbestos cement pressure pipe, which goes under the trade name of Transite Pipe and which represents a fair proportion of that company's business. JM ought to have more in total sales in 1950 than in 1949. It might not have quite such good profit margins because of a moderate setback in industrial products, which include the Transite Pipe, and its margins on some of the industrial products are better than on building materials as a whole. This is a company, however, that could increase its dividends even though it did not earn any more than in 1949.

The company that is more directly interested in pressure

pipe is U. S. Pipe and Foundry. The cast iron pressure pipe business is feeling the effects of competition from Transite Pipe. U. S. Pipe earned \$6.48 in 1949, but it earned \$4.07 in the first half and \$2.42 in the second half. Recently it was indicated that there has been some weakness in the price of pressure pipe. Costs have continued to rise since the end of World War II, except for a minor dip in the second quarter of last year when scrap iron declined quite sharply in price. From the looks of the trend in the volume of cast iron pressure pipe, I would say that U. S. Pipe might not earn much more than \$3 a share in 1950. At least I think that is the possibility, and, in a company which has such stiff competition from a long term point of view, I would almost accept any possibility as a probability in acting on the stock. Perhaps the dividend of \$3 a share which the company declared at the first of the year and pays quarterly might be a supporting factor, but I would not want to depend on it too strongly.

PUBLIC WORKS OUTLOOK FAVORABLE

It is indicated that the outlook for public works type of construction is favorable. This, along with residential building and a fairly good volume, although declining, for industrial construction, ought to give the cement companies a good year in 1950. Actually these companies had a very good year in 1949, and I think it would be a little bit too much to expect them to do any more than repeat that performance. If Lone Star did earn \$10 a share, Lehigh \$7, General \$5.50, and Alpha Portland \$5, I think that would be a very good showing for these companies. They had good profit margins in 1949 and a high level of business. I think the chances are that they will do about as well in 1950, and they might even do better, but I do not expect them to show very much of an improvement. Dividend payments may be the same as for 1949.

At the present prices for these stocks I wouldn't be particularly enthusiastic about them, although I do think that they might continue to give about an average performance.

Interest in the paint companies probably will be fairly limited in the coming year. The volume ought to be about as good as it was last year, and profit margins ought to stabilize. However, these companies are not likely to show much improvement. In some cases results may be somewhat lower than they were in 1949. I would look to Sherwin-Williams to make about \$5.50 a share as against \$5.73 last year. I include National Lead in this group because they produce so many paint pigments. It is in a little different category from some of the other companies because of its mine at Tahawus, N. Y., from which it obtains titanium. This material as an oxide has proved to be very useful as an opaquing agent with paint, paper, rubber, and in white wall rubber tires. Now there is considerable interest in the development of the use of titanium as a metal and in alloys because of its light weight and tremendous strength. This should be beneficial to National Lead.

Recently it has joined with Allegheny Ludlum to form a new corporation to do research work in the use of titanium metal. This probably gives National Lead considerable interest from a longer term point of view, but I do believe that earnings for the company will be somewhat lower for 1950 than they were in 1949.

There are probably a few other companies I ought to mention in passing: for example, Yale & Towne, which I think might earn \$4 in 1950, compared with \$2 in 1949. This company is beginning to emerge from some troublous times which it had after the death of its former president, Mr. Gibson Carey.

I would like to say something about the general building situation. As you know, I have made some long-term studies which indicate the need for about 850,000 dwelling units a year for a period of four or five years. I thought that these dwelling units would be built at reasonable costs. It appears that, with the stimulus given by FHA insured loans, the rate of residential construction will exceed one million units for a period of two or three years and that the cost will be about the same as at the peak reached in 1948. The rate of construction will be a little faster than I thought, and the houses will be built at a higher price. To me this means that the industry is more vulnerable than it otherwise would have been.

Because I am being forced to revise my ideas about the length of the building boom I am not quite so complacent about the drop that could occur later on. It appears to me now that the period of high level of building activity could be shortened and that, when the decline comes, it would be more severe.

As a practical matter, however, I think we ought to recognize that the stake of the Government in the building picture is quite large. The total amount authorized for insurance under title 2 is \$6.75 billion; under title 6 the total is \$6.65 billion; under title 7 \$1 billion; and under title 8 it is \$1 billion. This makes in all about \$15.5 billion. From a practical standpoint, it would seem that the Government is committed to go further into residential construction. I would expect more legislation in 1950 which provides easier credit and more credit, and more risky credit. I believe that the authority for insuring loans on the part of the FHA will be lifted considerably further. I also believe that additional programs will be added.

All this means to me a further stimulation to the residential building picture for another year or so. The only trouble with this sort of situation is that it is too precarious. It is not the same kind of situation as that which follows normal economic trends. It is not easy to analyze and offers no particular assurance. Thus, I think in light of this factor we ought to be a little more conservative than we ordinarily would be in our decisions as to what to do with building stocks. (*Applause.*)

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Chairman Galanis: Thank you very much. We have about ten minutes or so left for questions.

Question: Mr. Galanis, may I ask the name of the speaker from the Public Housing Administration?

Chairman Galanis: Mr. Herman D. Hillman.

Question: I have a question for him: Mr. Hillman, in connection with the slum clearance, has any property been bought as yet or acquired under that redevelopment program?

Mr. Hillman: No, I don't believe that any actual redevelopment program has gotten under way in the physical sense. They are still in the stage of preparation and planning.

Question: Now, in connection with that, it is assumed that certain slums would be torn down, isn't that correct?

Mr. Hillman: That is right.

Question: On the other hand, doesn't some provision have to be made to take care of the families that are in those slums at the present time?

Mr. Hillman: Yes, that is correct.

Question: Well, then, isn't it almost necessary that there be some kind of a prime for this pump before you get it started? In other words, a municipality would almost have to have title to some piece of property to which they could move these families, is that correct?

Mr. Hillman: Well, that is correct. The plan, of course, will vary from community to community. As a matter of fact, you bring up a point that is actually written into the act. This redevelopment program, which must be submitted for the purpose of getting Federal assistance, must show the means by which these families will be rehoused, either temporarily or permanently, pending the redevelopment of the site.

Now, the normal growth of residential construction, the availability of title 3, which could proceed in the early stages on vacant sites, the provision of temporary housing in certain communities which are being utilized from the war housing units that were made available during the war and which are being used for these purposes now, all of these are reservoirs which will be able to accommodate some of these slum dwellers.

Then, of course, there is the final provision in the legislation which gives the slum dwellers a preference for re-occupancy on any redevelopment project of residential character on these sites.

Question: It would almost seem that, before the program could get under way and generate much heat, the bloom would have to be off the building. There would have to be vacant places available before one of those things could really get going.

Mr. Hillman: I don't think that is necessarily so. I think that, with proper municipal and city planning, arrangements can be made in each particular community, according to the community's needs, for the rehousing of slum dwellers, and I know that in many cities these plans are actually being developed, and successfully.

Now, in that connection let me repeat that the public housing units in the early stages of the development of title 3 are going on vacant sites—more so than on slum sites. That is for that very purpose, to increase the housing supply for families of low income, so that later on it will be feasible to move families from slum sites into these new units.

Question: Will Mr. Logan please comment on the outlook of Carey corporation, which he mentioned earlier?

Mr. Logan: This corporation had quite a slump in its level of unfilled orders toward the end of the year, until about the third quarter. There was a sharp pickup in orders in the January report. They do not report quarterly, but the twelve months' figures indicate that the January quarterly earnings were not very satisfactory, even with the pickup in business. It looks as if they are going to have a tough time bringing their earnings back up very far. I don't know just how to estimate them for 1950, but I

would expect them to be not much better than they were in 1949, if as good.

Question: Mr. Chairman, I have a question for Mr. Logan: Mr. Logan, are you familiar with the feud that is going on between Mr. Avery and Mr. Baker—Mr. Avery of the U. S. Gypsum and Mr. Baker of the National Gypsum?

Mr. Logan: I suppose they always have had one.

Question: Well, I understand that wallboard costs have gone up in the last twenty years 85%, and, if you went to a lumberyard and bought wallboard, it would cost somewhere around 4½ cents a foot. If they are out of wallboard and you ask for a substitute, they will give you something that is paper and can be burnt up. You have to jump from 4½ cents up to something around 8 cents to get something substantial. There is nothing in between. I understand that situation is the result of the feud between Avery and Baker.

Every time Mr. Baker has gone up, he has gone up about five times as fast as Avery has, but it is the feud that is causing the trouble, and I was wondering, with the death of either man, if there wouldn't be big possibilities in that business. (*Laughter.*)

Now, I know what I am talking about, because at one time I was a director of the National Gypsum. I got the original money. And I think I had a lot to do with my clients saving National Gypsum when Mr. Avery was after Baker around 1926. The wholesale price of wallboard was 3 cents a square foot. Mr. Avery, in order to wash out the other gypsum companies, pulled the umbrella down and went down to 1¼ cents a foot, and out went Atlantic Gypsum Company, out went Universal Gypsum Company, out went Lucky Strike Gypsum. Then their sales manager went around and sold debenture bonds, but it was saved. Then National Gypsum picked up the pieces of these others that had gone out—Atlantic, Universal, Lucky Strike, and lots of others—and got plants all over the United States for a song. They were able to compete.

But there is no new gypsum company. Even if you had 5 million dollars, you couldn't go into the gypsum wallboard business, because you have a cost that is too near the selling price. It used to be a penny; now it is nearly two pennies, and they sell it for about 2¾ pennies. It is only through a great volume of business that they are able to stay in business, the whole crowd of them, but nobody else can venture in.

I was wondering whether, when one of these fellows dies, a thing like that couldn't be settled, and if there aren't tremendous possibilities for a patient waiter.

Chairman Galanis: That is gambling. (*Laughter.*)

Mr. Logan: I can't answer the question, but I would like to make this point: It was pointed out to us recently that there are not too many sites for new deposits of gypsum that are economical. Mr. Lazaar, who made this comment, said he wasn't afraid to increase his capacity about 50% over prewar. He said they didn't fear the price competition very much in the trade, because they had things fairly well under control.

I think it is pretty clear that they have a nice profit margin in the industry. They have a product that undersells most of the competing products that are comparable in quality.

Voice: I might take a shot at that: U. S. Gypsum sells its products at so much below cost, it only has a 25% pre-tax margin! I don't know whether you want to raise it to 50% or what!

Question: Section 608 just expired; is there going to be something to take the place of that? Will it be on less favorable terms, or will that cause a big drop in multiple dwellings?

Mr. Goldman: There is a resolution before Congress now that will probably be passed, that all the applications in by March 1 will be approved. There is a tremendous number of projects initiated in that stage. If that happens, we will see a very strong 608 market. There are enough commitments issued to insure a very strong market through June. The 207 project, which is scheduled to take its place, will be on much less favorable terms.

Under 608 some of the builders have been able to borrow as much as 20% above cost, and the story was, if you couldn't make at least five or six mink coats for your wife, you didn't know how to build a 608 project.

However, we think 207 can be workable, and, if they keep these down at the price level or rental level, we can have a fairly active market. The boys have tasted blood, and they will continue as long as they can.

Incidentally, you have never gotten any rental housing built even before FHA unless a banker was willing to loan more than the cost of the structure, and so that is likely to continue.

Question: I would like to ask Mr. Logan if he won't tell us something about the lumber and the brick companies, whether or not he thinks a company of the type of Zonolite, which has kind of sneaked in through the backdoor, might not have some influence on some of the other companies whose products it might replace.

Mr. Logan: I can answer that, but not very satisfactorily. I don't know the Zonolite situation.

Chairman Galanis: No one knows much about Zonolite. It is out in Chicago.

Voice: Zonolite is a mineral.

Question: I would like to ask Mr. Hillman, in connection with the 1949 housing act, is the annual subsidy sufficient

to enable the housing authority to sell all its bonds to the public, so that, unlike the 1937 housing act, a certain percentage would not have to be held by the Government.

Mr. Hillman: Yes, that is the expectancy, that the financing will be solely with series A bonds. And, as I mentioned before, because of the continuity of the annual contribution and the increased amount percentage-wise of the annual contribution, the security for the bondholder is almost absolute, and, therefore, we can expect we will be able to sell 100% of series A bonds, and there will be no necessity for the issuance of any B bonds.

Question: I would like to ask Mr. Logan to comment further on the Paraffine Company. You mentioned the fact, Mr. Logan, that they would probably earn more this year than last, but that you wouldn't rush in and buy the stock. Well, my thought is, after they get this plant constructed in Jersey, they—of course, they already cut the dividends, as you mentioned, and the stock is pretty well deflated. On a long-term basis, considering those factors, how do you regard the situation?

Mr. Logan: As I said, I think it is a fine company. The main difficulty is that they have a cash position that is fairly tight, and I think they are going to have to build another plant on the Coast. I believe that will hold down dividends for a period of time, and I think it is probably a little too early to go into it.

Chairman Galanis: Aren't they building a plant in Elizabeth?

Mr. Logan: They have it built and I think it is ready for operation in the Eastern market.

Question: Would Mr. Logan care to make any comments on the plywood industry?

Mr. Logan: I am supposed to know the U. S. Plywood Company and the industry. I am frank to say that I don't. They had a sharp decline in their business early in 1949, but it came back very sharply. I don't have an estimate for them for 1950, I am afraid. I am not afraid to make estimates, but I don't have the materials with which to make an estimate that I have any confidence in.

Chairman Galanis: Any further questions? The meeting is adjourned.

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1824 . . . Corn sold at Cincinnati for ten cents a bushel; wheat at twenty-five cents.

1837—February . . . Flour \$12 a barrel in New York City.

1879—November 12 . . . "Speculation raging in every department of business with a fierceness not within recollection, more people said to be gambling in provisions and other forms of merchandise than ever before."

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Outlook on Farm Buying Power

THURSDAY AFTERNOON, MARCH 2, 1950

JOHN H. WEEDON, assistant vice-president, First National Bank of Chicago, presiding.

Chairman Weedon: I was not surprised at all when the New York bunch came to Chicago to find some agricultural experts, but I was rather surprised at being asked to be chairman of this meeting. I could hardly believe that my fame as a grower of the most prolific tuberous begonias on the east side of Third Street could have spread this far. I say the east side because, having occupied my home for only twenty-five years in this exclusive suburban community, I do not yet know my neighbors on the west side of the street.

Mr. Peck, however, is quite different. During the past forty years he has become intimately acquainted with the farm families on both sides of our great American farm highways. Starting out in 1913, he was professor of farm management at the University of Minnesota. After that, he was director of agricultural extension work for the same institution. He was Co-operative Bank Commissioner for the Farm Credit Administration, and for eight years president of the Federal Land Bank of St. Paul, and he is presently managing director of the Farm Foundation. He was a member of the Hoover task force on the reorganization of the Federal Department of Agriculture. So I think you will agree with me that Mr. Peck is very well qualified to talk on the outlook for the farmer and perhaps his problems, and perhaps to give you a little insight on the confusion in Washington.

I take great pleasure in introducing Mr. Frank W. Peck. *(Applause.)*

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Mr. Frank W. Peck: Mr. Chairman, ladies and gentlemen: I recognize this is an awful time of day to perpetrate this sort of discussion on you. I am sure by the time I am through you will say it is a tough type of discussion at any time of the day, at any place. I have been bothered a good deal about this particular talk—a country boy coming to New York to meet with people who deal almost exclusively with the right answers *(laughter)*, and I assume you do or you don't stay in business very long.

I did agree, however, with the gentleman who approached me on this particular assignment that I thought I could at least contribute diversity to your confusion so far as the agricultural situation is concerned.

I should like to make three points: First, as background material, as the backdrop for what follows, I would like to discuss briefly some of the principal characteristics of this business that we call agriculture, or farming.

Second, the short-time economic outlook, and maybe a harmless shot at the longer point of view. However, those people who deal with agricultural forecasts, I think, invented the slogan of "safety first" because ordinarily they hedge their statements about so that, no matter what happens, they are reasonably close to the mark. Therefore, it is a

little safer perhaps from some standpoints to deal with the next two or three years rather than the longer time point of view.

And, then, finally, if you are interested, I shall talk a little bit about the present price support controversy.

Well, here is a great industry, according to the census, composed of some 6 million so-called family units, of which about 2½ million produce and market approximately 90% of the products, leaving a secondary type of farm population of at least 3 million people that are constantly being confused with the commercial farmers, the upper 40 or 45%.

It is the only business I know anything about in which the home is an integral part of the business, in which the family operates the individual business, and that is the reason you hear farming spoken of as a mode of life as well as a business in itself.

DIVERSITY AND VARIATION IN SOIL

It operates under a great diversity and variation in soil. Only 5% of the land of the United States is grade 1 soil; about 11%, grade 2; about 17%, grade 3; and 17%, grade 4. This means that almost half the land of the United States is not real agricultural land.

I think you can get a picture of where most of that land is. Only 15 states have as much as a million acres of grade 1 land, with Iowa and Illinois leading all the states.

One way to look at it is to take the so-called T formation that you are familiar with—most of you look as though you are football fans—you will take the small end of the T in Ohio and go west to Nebraska and Kansas and south to include Texas and north to include the Dakotas and Minnesota, and there you have the bulk of the grades 1, 2, and 3 land in the United States.

In that area that we call the Central West or in this T formation, if you spread the T out a little bit, you probably have 65 to 70% of the total agricultural production.

A NUMBER OF RISKS

The farmer operates, of course, under a number of risks, some of them insurable, most of them not insurable, from our understanding of what we mean when we say insurable. He is subject to so many of the sciences, the biological sciences, the natural sciences, the social sciences. He is a producer of raw product. That means he is subject, of course, or his products are, to immediate fluctuations, not only those caused by variations in production because of the weather and other risks, but also fluctuations in price.

SLOW TURNOVER

He has a slow turnover ordinarily in his capital. He has not been taught the principles of investment. I doubt if very many of the rural people have had opportunity to know anything about your business, investing so-called surplus earnings. For a long time the farmer felt as though he did not have much surplus earnings. He knows some-

thing about investing in land, but not enough, as has been proved by attempting to purchase land under inflated prices.

His income has varied from about 4 to 12% of the national income. It is never quite high enough for the farmer, and I presume the only fair share of the income is more than he will possibly be able to get. I think that is just the human reaction.

SECTIONAL INTEREST AND POWER

The farmer has developed in recent years a great sectional interest and sectional power. I don't think you can sell the farmer short from the standpoint of his political power. The bulk of the commercial farmers are organized into three farm organizations. Farm Bureau alone claims to have about a million and a half out of the top 2½ or 3 million. The Secretary recently characterized that organization as being formed by the aristocratic top of the farm population. It has grown into a number of commodity pressure groups bearing on Congress. It is rather powerful from a lobby standpoint. Otherwise, I cannot quite account for some of the actions of the Congress with respect to certain farm commodities. From that standpoint it is organized to be represented as one of the large industries.

It is almost wholly dependent domestically, of course, on full production by industry, on the purchasing power of industry. It has made, I think, a record in efficiency of production comparable to that of industry; it made a remarkable record through the war period, some 30% increased output per man. There were 20% fewer workers in 1945 than in 1930, and the farm laborers are turning out approximately twice per capita what they turned out prewar.

LAST EIGHT YEARS PHENOMENAL

In fact, from a production standpoint, the last eight years have been phenomenal. I question whether we will see another period, a consecutive eight-year period, nationally, with the agricultural output changing from 125 to 140% of the five-year prewar period, 1935 to 1939.

Well, so much for the first point of the general background material of the so-called industry.

I can only quote about the outlook for the prospective share of the national income, from those people who annually, through the Department of Agriculture, publish what they call their outlook report. I think they are agreed that the farm income this year will be at least 10% less than it was in 1949. It was about 10% less in 1949 than it was in 1948; something like 5% less in 1948 than in 1947, 1947 being probably the top year. It depends a little bit on whom you listen to, and perhaps a little bit on some of the assumptions.

SECRETARY MORE PESSIMISTIC

The Secretary is the most pessimistic one I have heard talking about the income for 1950. Recently in a rather notorious (as it turned out) talk in Des Moines, Iowa, at the National Farm Forum, I think he got a little carried away under the difficulties of the moment and predicted even more than a 15% drop in net income of the farmer for the coming year and painted a rather pessimistic picture for 1951 and 1952 unless the Brannan Plan were adopted.

In any event, we have had a net income ranging, I pre-

sume, through the years, at the top maybe \$22 billion or \$23 billion or \$24, estimated now to be \$20 or \$21 billion. The lowest estimate I have heard (which I do not believe can be sustained) was \$18 billion and the highest \$24 billion, but, at that, it will be 2 1/3 times higher than the 1940 figure.

I think the balance sheet of our agriculture is an excellent example of using inflated prices on physical assets. I am quoting now from the 1949 published figures, which really represented the year of 1948 when the physical assets of agriculture were at \$105 billion, compared with \$44 billion in 1940. If you put 1940 prices on the physical assets of 1948 you would get \$64 billion in place of \$105 billion. It was estimated that year that the farmer had in liquid assets, expendable money if you please, something like \$22 billion. That is a sizable sum.

I have never been able to figure out just who had that \$22 billion, but I am satisfied that these 2½ million farm families probably had 80 to 90% of it. It is estimated, however, that in the past year those figures have come down something like \$4 billion, and so we have something like \$123 billion presently the total assets in agriculture. That is as good an illustration as I know of about using different prices for more or less fixed assets.

LIABILITY SIDE FAVORABLE

Now, the liability side, I think, is quite favorable, with one danger point. The total was estimated to be about \$11 billion. Close to \$5½ billion of that was land mortgage credit; about \$3 billion was short-term credit or debts, and then the Commodity Credit Corporation at that time had \$3 billion, now estimated to be about \$3½ billion of liabilities.

That institution is gradually assuming a tremendous role in the financing and in the marketing of these various surplus products.

On the whole I think you will say that the ratio of assets and liabilities is favorable. I do not see anything in the picture that would indicate more than this 10 or 12% drop in 1950. The cost will stay up temporarily. It will begin to come down, but I would suspect that 1951 may show another 10% drop, depending somewhat on industrial activity, on the take-home pay of our domestic population, and, I think, on what we continue to do with respect to the foreign trade problem.

Certainly we have a difficult situation from that particular point of view if you look very far ahead as to agricultural prospects. It is true that until 1952, maybe longer, we may be subsidizing purchases of food for foreign countries. They need particularly essential food imports for their people, such as wheat, vegetable oils, and sugar, but what will we do with this big dollar gap of some \$6 billion unfavorable trade as excess of exports over imports? How are we going to continue, if we are to continue, to build an agriculture that will have surplus production and markets abroad under our general foreign trade policy?

I am a little confused about these policies. I hear some of the experts saying that sooner or later, and the quicker the better, we ought to take off the restrictions with respect to trade. You could knock off \$1 billion or \$2 billion or \$3 billion of this gap or close it if you would take off

certain trade restrictions. But then the political parties with their programs indicate that it would be most unfortunate to make any change with respect to taking off these restrictions. Where we have total exports of \$14 billion in which agriculture is a little less than \$4 billion, I would say that for 1950 and 1951 and maybe 1952 there will be sufficient subsidies to take at least a portion of our exportable products.

Now something about the little longer point of view. From the standpoint of the longer point of view, I think we have to look a little bit at population. You see, all the experts are not quite in your field, are they? The experts on populations, I guess, unanimously missed the boat. We had 10 million more people in the United States through 1940 than anybody said we would have. You will recall when it was said that we would soon have 165 million people in the United States; now they have it up to 200 million, 250 million, and our friend, Mr. Moulton of Brookings Institute, in his recent interesting book says that America can have 300 million people in the next hundred years living on levels eight times higher than our present levels of living.

I read Mr. Moulton's book. I was talking with him about it. I do not agree with a number of his agricultural conclusions, but it was interesting to read. I asked him, "Where did you get eight times the present level of living?"

He said, "I guess I took it more or less out of the air. I knew we could do it several times over, so I said that, if we wanted to and certain things happened, and if we failed to do certain things, and, on the other hand, if we did certain other things, then we ought to be able to live eight times better and have 300 million people in this country." (Laughter.)

Well, I don't know whether we are going to have control of production of all kinds or not. I do agree with Mr. Moulton when he says that the potential production of agriculture has tremendous possibilities of going much farther than it has gone, with mechanization, technology, and education. I do not agree with the people who say that population is going to press on our production so that many of our people will not have enough to eat. That will not be the reason people won't have enough to eat. The productive capacity and potentials are there.

So I say, from the long-time point of view, we can expand the farm plan. That means, if we do that, that we ought to decrease the number of farmers, and that will call for population shifts, unless Government price supports maintain an artificial level of prices and incomes, and I am almost constrained to say that, unless we have a pretty good idea of what Congress is likely to do or what the Government part is to be, then it is very difficult to estimate what in the long run will happen to agriculture.

What I mean is that the adjustments, I think, will follow these lines: There will be more efficient production, a more intensive agriculture, fewer farms, larger units, increased production per man, increased capital requirements, more mechanization and technology and power, more electrification, more of the social side of emphasis on that portion of our productive plant in the hands of efficient producers.

Unfortunately, and if I am not careful, Mr. Chairman, I

will be expressing some of my own opinions here, it appears as though we will continue to put a premium on inefficiency so far as agriculture is concerned. Someone said the other day that you and I ought to be really glad, however, that we are not getting as much Government as we are paying for. (Laughter.) I really think there is something to that.

Now, these problems of adjustments, of retooling, of making choices of what and how much to produce are just as much a business problem to the operator as they are in any line of business. He does not have quite the controls when he once starts in a line of production. That is what some of the potato people are hollering about now, and that is a nice story, isn't it? Some of these potato people are rigged with tremendous acreage, tremendous equipment, their labor contracted for, and now they are cut down to an acreage for the coming year, which means many of them will go out of business. Well, many of them should not have gone into the business, and they wouldn't have if it had not been for a benevolent price-supporting agency.

That brings me to the price support controversy. I say "controversy" because that is what it is. I have prepared, just to show you that I can oversimplify as well as others, on a sheet here a simple little illustration. It shows a number of the principal factors in the price support, the present law, the 1948 Act, and the Brannan Plan, all on one page, just as simple as that. If you are interested, you can take a copy, but I doubt if you will understand some parts of it. It is not carried out in detail. As a matter of fact, the present act is extremely complex, and the Brannan Plan is more so.

Well, let us look at the present 1949 Act. That was a compromise of the 1948 Aiken Bill. Personally, I think the Aiken Bill had those flexible price supports. I think it tended to deal more sensibly with the agricultural situation, certainly much more sensibly than the present act and the Brannan Plan. It still was too high for 1950, but it had more flexibility after 1950, and to those common, basic products which are wheat and corn and cotton and tobacco and even peanuts—I never did understand how peanuts got in, but they are there—were added wool, eggs, chickens, and hogs, and the Secretary under the act now in effect is given tremendous administrative responsibilities.

I wouldn't want this said outside, but I cannot conceive of anybody successfully administering the present act, and I am dead sure that that would be true of the Brannan Plan itself. It is much more difficult to administer acceptably than the Aiken Bill, had that been allowed to become law.

Well, let's look at the Brannan Plan. I sat through the Des Moines so-called debate between Alan Kline, president of the Farm Bureau, and Secretary Brannan. I have understood since that Secretary Brannan had been ill the week before. His talk in New York was read by the Under Secretary of Agriculture. At that one he just warmed up to the Farm Bureau, but he certainly got hot at the Des Moines meeting. It was highly disappointing from a factual point of view but quite pleasing to the group who came for some of the fireworks. It is a rather sad commentary on our statesmanship. Before an audience of 4,500—granted, most of them from Iowa; I suppose, the great majority Farm Bureau members; and probably most of them Mr. Kline's friends—nevertheless, before an audience of 4,500 gathered

to hear the technical answers to questions involving a serious price support program, the meeting degenerated into a personal attack in which the Brannan Plan was not explained until, later, under severe questioning, one of the men from Illinois pinned Mr. Brannan down to the questions: "Just what is your plan, and how much will it cost the Treasury?"

Those were two rather objective questions. Let me say, don't anybody sell the President's Secretary of Agriculture short from the standpoint of not being able; I think he can talk to almost any group and talk effectively. I don't quite understand him, but—(Laughter) he is clever; he did a swell job, an hour too late in saying specifically what his plan was, but he ducked how much it would cost, of course.

Here is what it does—in the first place, I think for the first time (I don't think this is so important, although the Farm Bureau magnifies it) the Brannan Plan for the first time throws the issue directly into partisan politics. I think it has always been in politics anyway whether it is partisan or bipartisan, but the Secretary admits it and proposes to go to the country with it as a political issue. It throws the old parity formula out the window.

Well, a lot of people wouldn't object to that, going away back to 1909–14 as a base period anyhow, but the plan selects a period of ten years through the war from a total income standpoint, so that in 1950 if the Brannan Plan had been in effect for this year one would expect a gross farm income of \$26¼ billion, which is from \$2 to \$3 billion at least more than would otherwise be the case. It would be a little higher support level.

Then it adds a number of other products for priority of funds: added milk, eggs, chicken, beef cattle, and lambs, aside from the so-called basic crops.

Then, of course, it does another thing which is responsible for the claims that the Treasury would pay the grocery bills of consumers. It would let all perishable products seek the open market, the free market. Theoretically that is as good a thing, I think, as you could have. Only I think they should have put all the products on the free market, not just the perishables. And now the Secretary agrees with that and says he would like to try it even with cotton, which I think would be a noble experiment. (Laughter.)

With these production payments on perishables, he would let the market seek its level and then pay the producers the difference between what they said was a fair price and the price they got. That brings up the question of what is a fair price, and he has a formula for that, a high formula, you see, because the object is to keep the farm income up. The Secretary very cleverly dodged the fact I mentioned to start with, that we have two great groups of farm people, and the people that would be benefited would be the top 2½ million. The others for whom they would like to raise the levels artificially could not be helped much by the price support program, but if you let them set what they consider to be a fair income and make up the difference, then it would help these people, and perhaps that is one reason why they shy away from explaining the total cost of this program. That depends on conservation practices, acreage controls, marketing quotas, and agreements.

Then the Secretary had in his plan discrimination against the big operator. That sounds very good when you are

talking to a large number of small holders, of course. You must remember some arithmetic is involved in this, and you multiply by certain large groups of people when you have certain objectives. So he said that anybody who is producing more than what he called 1800 units—that would be the same as 18,000 bushels of corn, for example—on a single family unit would be out of the price supports; he couldn't get them. It was a play for the great multitude of the smaller farmers. I do not think that would be a part of the law. I think it would be wholly unconstitutional and impossible to operate under.

Well, what are the objections to the program? In the first place, any of these price support programs, including the present one we have, it seems to me, are just incompatible with the optimum use of agricultural resources. The program is restrictive; it is against full production. It contributes, as I see it, to emphasis on the inefficient. It will not permit the full play of what I would hope could operate under good economics. The price supports are entirely too high. How are you going to keep production from exceeding market demands at high prices? What are you going to do with the products the Government acquires in supporting prices—potatoes, eggs, and it will be cotton; it will be tobacco; it will be any number of these, as I see it, under their stimulated price support program? How would you prevent increased production of substitute products? Why will you not expect to keep people on the land when large numbers of them ought to be leaving the land?

This freezes; it freezes production; it freezes the farmers' capital; it freezes many people on the land. It seems to me from many of those standpoints that it just wouldn't work.

The farmers' union supports the Brannan Plan 100%, and if you knew the history of that organization possibly that wouldn't be surprising. The Grange and the Farm Bureau both are opposed, but with a few different arguments. Without exception, however, it seems to some of us that, when you continue to mix politics with economics, when you adopt expediency and a temporary type of program, this sooner or later will change the complexion of a great industry, or it will result in increasing influence of centralized control and regimentation, which in itself will change the industry.

It seems to me that we are in a difficult economic and political situation so far as Government is concerned.

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Mr. Chairman, if there are any questions, they are going to follow after the other address, I understand?

Chairman Weedon: Yes.

Mr. Peck: Thank you very much for your kind attention. (Applause.)

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Chairman Weedon: On the Army discharge papers of our next speaker appears the following legend, "Tom H. Hildebrand, born in Good Intent, State of Ohio." Good Intent is the name of a little town in Ohio. Tom was born right across the street from the schoolhouse, and it was in that schoolhouse that his father taught his mother—(laughter)—I mean in educational subjects. It was on that same site that his grandmother taught his grandfather. (I hope I got that straight.)

How Tom ever got as far as the University of Illinois away from his home town, I don't know, but he did attend the agricultural section of the University of Illinois and since that time has been with the International Harvester Company.

Here, again, we find that Tom's grandfather was with the International Harvester Company; his father was with the International Harvester Company; he is with the International Harvester Company, and, as soon as his son graduates from an Ohio university, he will also become employed by the International Harvester Company. So we have a good American background in a good American company.

Tom has worked as district sales manager in various parts of Illinois and later as regional sales manager in the southwestern, central, and northeastern regions of the United States. At the present time, he is the manager of the estimate and order review department. That department forecasts the sales requirements of the company and establishes measures for determining the production facilities to support these anticipated sales needs.

I take great pleasure in presenting Tom H. Hildebrand, of the International Harvester Company. (*Applause.*)

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Mr. Thomas H. Hildebrand: Mr. Chairman and members of the National Federation of Financial Analysts Societies: It sounds like the Hildebrands have been in a rut so far as schooling and so far as their employment are concerned.

I have been asked to discuss the outlook for the farm equipment industry as it appears to a member of that industry. It will be my purpose to help you formulate a realistic opinion of the outlook for this industry, based on an appraisal of trends and influences that are apparent at this time.

Before going further, however, let me say that I am not a prophet or soothsayer. My projections are not to be regarded as predictions but rather as indications of what could develop if current trends progress in an orderly fashion.

The term "farm equipment" includes that machinery used in soil preparation, planting, cultivating, spraying and dusting, harvesting and preparing crops for use or for market. It includes the tractors used to operate this machinery—wheel tractors, crawler tractors, and garden tractors. It also includes such items as farm dairy, farm poultry, and barn and barnyard equipment. According to the Department of Commerce, there are approximately 1,600 firms engaged in the manufacture of farm equipment. But *seven companies* produce something like 65% of the total output of the industry.

For most people, the term "farm equipment industry" brings to mind a list of possibly 8 or 10 companies that concentrate on the manufacture of tractors and equipment used in the *production and harvesting* of the major field crops. But these companies are not all major producers of all types of agricultural equipment. Many of the smaller companies which share the over-all market are important in their own specialized fields and render a very real and valuable service to their customers.

Now that we have indicated just what type of enterprise the farm equipment industry is, I think it would be well to define its basic concept. The basic concept of our industry

is to produce more efficient tools and equipment for agriculture, to be used in the production of food and fiber for human consumption. We are proud, and rightfully, I believe, of the progress made in farm mechanization over the years since Cyrus Hall McCormick perfected the reaper.

To avoid any implications, however, that mechanization has been solely responsible for the success of the farmer today and will be for the farmer of the future, acknowledgment should be made to other forces. Scientists have learned and expounded the needs of soils. New ways to preserve food have come from laboratories. Plant innovations, ways to control insects and diseases, new uses for agricultural products, more knowledge of breeding practices and countless other developments for higher productivity and better living have all played an important part and will continue to do so.

We are optimistic for and have strong confidence in the long-range future of the industry. Our optimism is supported by the fact that agricultural progress must go on, regardless of any temporary or cyclical ups and downs and "bumps in the road" of our economy. I wish to substantiate, if I can, this feeling, in the time at my disposal.

First, let us look at the market for farm equipment. Since the end of World War II, the demand for farm equipment has been at an unprecedented level. This large demand was brought about by a number of factors including:

1. Large cash farm income.
2. Shortage and high cost of farm labor.
3. Favorable prices for farm equipment in relationship to other costs.
4. Inability of farmers to replace equipment during war years.
4. World food requirements.
6. Foreign demand for farm equipment.
7. High feed prices.

The foregoing, of course, are the more immediate factors that brought about the tremendous demand for farm equipment during the last few years. But the one great factor that contributed most during past years to the market for farm equipment as we know it today was the switch from animal power to tractor power. I think it is safe to say that tractor power and the improved machinery that it made possible are today indispensable to our economy.

A hundred years ago, for example, over 65% of the Nation's labor supply was engaged in agriculture. It required the labor of seven people on farms to feed and clothe themselves and three people in the cities. By 1900, machinery operated by animal power was doing part of the work of land preparation, seeding, cultivating, and harvesting, and only 37% of the Nation's workers were on farms.

Today, owing to the efficiency of tractor power and labor-saving equipment, only 13% of the Nation's labor force is engaged in farming. Some of our lawmakers, at least, suspect that these 13% have the capacity to produce more food and fiber than the other 87% of us can consume. Hence, the Brannan Plan and other proposals of that kind.

With only 13% of the country's labor force located on farms, then, it is quite obvious that the American farmer is going to need large quantities of machines and equipment, either new or as replacements, to aid him in accomplishing this tremendous job.

There is little need for us to give much thought to those skeptics who believe that the market for farm equipment is or shortly will be saturated. Even in cases where it would appear, superficially, that the market is filled up, this appearance is misleading. This is not just wishful thinking on my part. It is actually borne out by the situation that exists at the present time.

Let's consider the number and location of farm tractors, for example. It is estimated that there are about 3,500,000 tractors on farms today. This is a ratio of about six tractors to ten farms. The distribution of tractors ranges from estimates of 118 tractors per 100 farms in the wheat country of the Northwest to 83 tractors per 100 farms in the Corn Belt and 18 tractors per 100 farms in the southeastern region of the United States. These figures show pretty well the acceptance and growth of farm mechanization in the different areas of the country. They also show that the industry still has some way to go before the market is saturated.

There is another factor that we should consider when discussing the distribution of tractor power. With the general adoption of tractor power in any area, there comes a trend toward fewer but larger farms, as small units are combined. Ten years ago, there were slightly more than 6 million farms in the United States; today, there are slightly under 6 million. By the time mechanization has reached its practical limit, we shall probably have somewhere between 5 and 5½ million farms, powered by somewhere in the neighborhood of 7 million tractors. If this opinion of the anticipated trend is correct, we stand today just a little beyond the halfway point. When the saturation point is reached—and we are sure that it is some years in the future—the annual average replacements required, based on a tractor life expectancy of about ten years, may be somewhere around 700,000 tractors per year. I doubt that the industry today has capacity to build that many tractors.

As another example, take the grain binder. Grain binders have been built for something like eighty years. There are thousands of them in use. A few are still built each year, but not enough to replace those that should be wearing out. Why? The grain binder is obsolete. Those now in use are being replaced by the combine or harvester-thresher, which cuts and threshes the grain and many other crops in one operation. And the market for combines will not be saturated until the last grain binder is replaced. That point may be twenty years in the future or it may be ten years off; we only know that we still have a long way to go.

Any thought of markets for farm equipment becoming saturated or machines becoming obsolete is offset by one determining factor that has prevailed within the farm equipment industry since its very beginning. That factor is made up of the aggressiveness, the engineering skill, and the desire to improve, which are so much a part of the industry.

Looking at the developments of recent years, we see the results of such activity. In addition to the combine, these years have brought the small tractor, the mechanical cotton picker, the beet harvester, the pickup hay baler, the further development of subsurface tillage implements for the arid regions and the new lines of precision planting and precision fertilizing equipment, to make the best use of the special seeds developed by the plant breeders.

We have, of course, our areas of failure. We have not yet succeeded in producing machines that will pick fruit or berries. We have not been able to mechanize the harvesting of vegetables, except for a few crops like beans and potatoes. Yet we continue to try, and I believe we will go ahead. As new varieties of crops are developed, we expect to find ways to get them into the soil under the right conditions and get them harvested in the right way and at the right time.

All these things taken together seem to me to point toward a future in which the production of American agriculture will be greater than ever, more efficient and accomplished, with a constant decrease in the physical toil required by the American farmer.

Up to this point, I have discussed the market for farm machinery—its potential, and what the industry is doing to sustain it. But if an industry such as ours—and this applies to other industries as well—is to continue to be successful and of service to its customers, the customers, in turn, must possess more than the *desire* or the *willingness* to buy the machines and equipment needed. They must also have the *ability* to buy. What then, is the outlook for the months ahead? Here is the situation as it looks to me at the moment.

During 1949, the backlog of urgent demand that resulted from wartime shortages was satisfied except for a very few items. The "black markets" are gone. Inventories, which normally accumulate through the winter toward a peak of seasonal demand in the spring, are again following this pattern. There is every reason to believe that 1950 will see the *complete* return of a buyer's market and competitive selling.

You are no doubt familiar with the general business forecasts for 1950, issued by Government agencies, private institutions, and individual economists. They seem to be in practically complete agreement on these essential points:

1. The level of general business will be high—at the present level or a little above—through the first half of the year, declining slightly during the second half.
2. The average for the year, in regard to industrial production, national income, gross national product, and so on, will approximate that of 1949.
3. Farm income will be on a downward trend, and the total for the year will be about 10 to 15% below 1949.

To me, such unanimity of opinion is a little bit frightening. It is disturbingly reminiscent of the forecasts that have been made in past years, just before sharp economic setbacks. But that is just my own feeling, and may be I'm a little bit gun-shy. Certainly the people who issue these forecasts usually make out a case that should convince anyone except a confirmed skeptic. So let's base our assumptions on the majority opinion and go on from there.

Farm income is anticipated to be on a downward trend in 1950. Historically, farm equipment sales have been proportional to farm income, and so one might infer that they would be off slightly.

But a couple of factors in the situation today differ from those of the prewar period—1941 for example. In 1941, the farmers' financial assets—U. S. savings bonds, bank deposits, and currency—amounted to about \$4.6 billion; today they amount to about \$20 billion.

With that kind of a financial reserve, the farmer is not forced to depend on current income expectations to the extent that he once was in planning purchases.

The other thing that is different today is the character of the farmer himself. The successful farmer of today is a businessman. He thinks like a businessman, in terms of costs and profits. He operates a complex enterprise with a sizable capital investment. He is alert and aggressive and forward looking. He is not only receptive to new ideas, new methods and new equipment—he is also actively seeking them.

This was not always the case. There was a time when new ideas had to be sold, and the selling was sometimes a slow process. Cyrus McCormick labored thirty years to introduce the reaper. Perfected in 1831, it was not until the Civil War created a shortage of man power and a heavy demand for food that his machine gained real acceptance.

Contrast that with a recent experience of ours, when a rumor got out that we had an experimental sugar beet harvester that looked promising. We were visited by delegations of beet raisers who insisted that we get the machine into production at once.

This change in the attitude of our customers has been going on gradually over a long period of time, and we did not think much about it. We simply adjusted to it on a day-to-day and year-to-year basis, in the normal course of business. Then came 1941, and the war and not until just recently has there been any normal business.

PROGRESSIVE TREND HAS CONTINUED

I feel sure that this progressive trend has continued—has indeed probably been accelerated. Consider the hypothetical case of a farm boy, who as a member of the Armed Forces, saw a lot of the world and learned to operate some of the most intricate mechanical equipment ever devised by man. Out of service, he is probably back on the farm today, planning to acquire better equipment to make the best possible use of his land which will aid in providing advantages for his family he did not know of as a boy. Maybe by now he has a good start on such a program.

Multiply this case by several million, and you will have some idea of the change that may have taken place in the last ten years. I think it is a plus factor in the business outlook for 1950, and for years to come.

Considering everything—the *needs and wants* of the farmer which are still unsatisfied, the possibility of a farm income level still far above prewar in terms of either actual dollars or buying power, and the large accumulated reserve of savings—it does not appear that the U. S. market for farm equipment should shrink very drastically. Retail sales could be pretty close to the 1949 level.

But U. S. retail sales do not tell the whole story. We must remember that the industry entered 1949 with very little inventory in the hands of dealers. The dealers ended 1949 with considerable inventory. Although I do not have figures for the entire industry, I think the situation existing in my own company could be called typical, and my conclusion is that the inventory pipe lines are filling fast on many items of farm equipment. From here on, the industry cannot depend on inventory accumulation to absorb a large share of the factory output. The dealers will sell goods in

stock and will buy on a replacement basis. If production schedules are not supported by retail sales, they will have to be reduced.

EXPORT BUSINESS DOWN CONSIDERABLY

Export business will be down considerably, as a result of the difficulty in securing import permits, dollar shortages, and currency devaluation. This means that the domestic market must absorb the export deficiency, if the industry is to maintain full production. And the industry's productive capacity, at full schedule, is at least as great as that of 1949.

Because of this situation, I do not believe it likely that the industry can operate at full capacity throughout 1950. To do so would require domestic retail sales considerably in excess of 1949. Although this is not impossible, it is certainly not probable. It appears more likely that some companies will find it necessary to reduce schedules at the end of the spring selling season, if not before.

Perhaps price reductions, if they could be achieved, would stimulate retail sales enough to take up the slack. But the possibility of any general price reduction at this time, for most of us, would have to be regarded as wishful thinking. Costs are going up rather than down. The price of steel and other materials is up. The probable settlement of the pension plans now under discussion will add to labor costs. Selling costs in a competitive market will certainly be higher than they have been in the past few years. Every effort will be made to "hold the line" on present prices, but we must admit that holding the line may be an impossibility.

The result of this combination of decreased sales volume, increased costs, and price rigidity—if the situation develops along the lines suggested by the present trends—could easily be a squeeze on profits. To some extent, possibly, this can be offset by good business management and intensified sales effort. All companies in the industry will utilize every legitimate means to protect and improve their positions. They will effect economies wherever and whenever possible—in purchasing, in manufacturing, and in selling. The success they are able to achieve in the application of these measures will largely determine the results of their 1950 operations. (*Applause*)

* * *

Chairman Weedon: Thank you very much, Mr. Hildebrand. I am sure we are all very indebted to both Mr. Peck and Mr. Hildebrand for their very fine presentations. I know that you have some questions to ask, and I know they will be glad to answer your questions insofar as possible.

I never sleep very well on the train, and so I had fortified myself with the November copy of the *Atlantic Monthly*. I had been promising myself to read Professor Slichter's report, and I had never gotten around to it, and so, as I sat there in my bedroom reading this report, I finally dozed off and I had quite a nightmare. I dreamed that we were all gathered in this room, but, instead of being in March of 1950, it was in March of 1960, and, instead of having Mr. Peck speaking on the predictions for agricultural incomes, we had Secretary of Agriculture Con. He was the author of the Agricultural Act of 1959, better known as the Con-Fusion Act. He was speaking on farm income.

Ladies and gentlemen: You have asked me to predict farm income for 1960. The word "predict" has, of course, become obsolete because with the operation of the Confusion Plan, I can tell you to the penny the farm income for 1960 will be \$60 billion and one cent. The cent, recognized by the Farm Bureau as an integral part of the billion, was included in order to afford full recognition to their views on the subject.

From the growing income figure, which represents the payment by the Government of \$10,000 to each of the 6 million farm units, must be deducted the Federal deceptive tax, amounting to \$5,750 million. This leaves a net expendable income in the hands of our farm friends of \$54,250 million. The Federal tax is based upon the previous year's production. Inasmuch as $2\frac{1}{2}$ million units produce 90% of the farm products marketed last year, their income is taxed at the 90% rate. The $3\frac{1}{2}$ million units that produce 10% will be taxed at the 10% rate.

The outlook for farm income in 1961 is much brighter because we expect that the tax impact on the great majority of our farmers can be considerably lightened.

The accomplishment of this objective is simplicity itself. In 1961 4 million farmers will no longer produce. Consequently, farm production will be reduced 28% and the tax of that portion of our farm families will be eliminated. The remaining 2 million reactionary farm units will now produce 100% of the marketable crops and will be subject to a 100% tax.

I can definitely state that gross farming income for 1961 will amount to \$60 billion, but that net farm income will be increased to \$58 billion, the only deduction being the \$2 billion tax on our diminishing reactionaries.

Inevitably an increased number of farm units will become "confused," thus curing once and for all the ever-recurring problem of farm surpluses which have plagued farm administrations in the past.

In the marketing of farm products, the Government will set prices that will produce whatever amount is necessary to offset the benefit payments made to farmers. Thus, as you can see, the cost of my great plan is nil. [Applause]

Now, if there are any questions from the floor, we will be glad to hear them.

Question: May I ask Mr. Peck if he sees any trend among the actual farmers—I don't mean the Farm Bureau officials—toward accepting or discarding the Brannan Plan?

Mr. Peck: Undoubtedly, in that large organization in which they claim $1\frac{1}{2}$ million farm families, it has been evident in some of the southern area that there are numbers of Farm Bureau people who would support the Brannan Plan. According to a vote, taken at their annual meeting, they are rather overwhelmingly in favor of opposing the Brannan Plan. Doubtless many individuals in the organization would favor the Brannan Plan, depending on how they figure their particular fortune would lie with respect to the plan as contrasted with the 1949 or 1950 Act. I couldn't give you any statistics on it.

Question: I would like to ask Mr. Hildebrand to make a few remarks about the truck as a piece of farm equipment and the prospects for International Harvester's truck sales this coming year.

Mr. Hildebrand: You know, we have a complete new line of trucks. We are having excellent acceptance. Our big problem right now is, of course, the power shortage caused by the coal strike and the steel shortage, but we

think if we get them on the market we are going to retrieve our past participation in the market.

Question: Do you do better than the other truck manufacturers because of your close association with farmers and servicing and so forth?

Mr. Hildebrand: We get a large volume of our business in the industrial sections. However, we do lead in the heavy duty sizes of trucks. That has been our field. Then, in the lighter trucks we are closer to the farm market, and, as you know, more than 25% of the trucks registered are registered by farmers.

Question: Mr. Peck, from a practical standpoint would the adoption of the Brannan Plan have much effect on the retail price of goods in your opinion?

Mr. Peck: Well, I think the Brannan Plan if put into effect with some of the perishable products would result in the prices tending to go lower. If you take into consideration the taxes that would be used to supplement the income you might conclude that the prices actually were not any lower, but I think you must consider this, too, and that is: who pays the great bulk of the taxes? The bulk of the city consumers of food? Or is the great bulk paid by the top third of our population? You cannot just look at the total taxes and say that that equalizes what might be called lowering of prices. I think politically it is a very clever appeal. I do not think it would work in the long run, but I would not be a bit surprised to see it tried and with some lowering of the price of perishable products.

Question: Wouldn't there be some restriction on the planting of those products and so on, which would in effect cause the retail price to be just about where it is now?

Mr. Peck: Of course, if you could have sufficient controls. So far the controls have not been very effective. Granted that most of them have been acreage controls, and therefore they would not be so effective as though they had the marketing quotas, but whether or not politically in this country you can regiment farm people to say you can produce as much as you want to but you can only market so many units I do not know.

I think in the long run your line of reasoning possibly would operate if it lasted that long, but temporarily I think it would do something as the Secretary described.

Question: What I had in mind primarily was the effect on organizations such as grocery chain stores. Would it affect their volume of sales to any substantial extent?

Mr. Peck: I do not think it would adversely affect their volume of sales. I see no reason why it would affect their volume. I don't see that it would affect their profits particularly. I doubt if that would be particularly noticeable.

Question: Of course, their costs would go off as well?

Mr. Peck: How far the total food bill would go off depends on how many products would go under the so-called Secretary's plan. The Secretary now appears to be changing his mind, and possibly he will come out with all farm products seeking the free market and depend wholly on supplementary income payments to farmers to maintain their income. That would be quite a step for the Secretary to take, but it might be done.

Question: I would like to ask Mr. Hildebrand a question. Leaving aside the long-term factor of working toward the mechanization of the farm in which you and Mr. Peck and

I think everyone else is in agreement, would you try to rank for us, in your opinion, the factors that bear on purchases of farm income in their importance as follows:

1. The possession of an improved net working capital position by the farmer which you have described.

2. The level of the most recent year's farm income, say 1929.

3. The probability of the trend of the present or coming year's farm income?

In your opinion, in what order should they be ranked as bearing on the purchases of agricultural implements?

Mr. Hildebrand: I have seen every one of those phases ranked first, depending on the cyclical economy. It depends on whether we are on a downward trend.

Question: Assuming the present situation, where you say you have the pipe lines full?

Mr. Hildebrand: The farmer recognizes the fact that there will be a downward trend in his income, and he does not have to buy a single piece of machinery to produce crops. He can defer all his requirements because he has enough machinery to produce a crop. But, if the coal strike continues and he thinks it is going to be hard to get machinery, he will flood us with orders for fear he won't be able to get the machinery that will save him labor costs. I think right now that the farmer is going to buy machines because he does have financial assets for buying, and he is going to buy on the basis of an investment.

Your farm labor, I think, according to the last index I saw which was about January 1, was 430 as against 128 prewar. So you can see that his labor costs are high and he is still going to be influenced to make that investment.

He is in a quandary now because of his acreage allotments. He doesn't know what kind of machines to buy. I was talking to one of our dealers down at Bloomington, Ill. That is in McLean County, the heart of the Corn Belt. I said, "What is the corn acreage allotment going to do to you?"

He said, "They are going to cut us 23%."

I said, "What in the world will you grow?"

He said, "I guess soybeans would be the most natural thing in this particular area, but it will be potatoes."

I have had the first calls in the history of my business for potato machinery in that county, and there isn't any in the county. He can raise potatoes. He tells me that he can do so in that area—I have not checked into the law—because there is no acreage allotment on potatoes there.

The farmers have gone to the university to see what they have to do to raise potatoes because it is a guaranteed crop, and I know the farmers in that area don't need the money.

Question: Mr. Peck, from reading the papers and reading about the surpluses, not only in potatoes, but in dried eggs and in butter and other products which the Commodity Credit Corporation is accumulating, do you feel that over the next six months, as close as that, the present farm support program is in danger of collapse?

Mr. Peck: Well, the word collapse isn't quite clear, and certainly it is a short length of time, six months. I would say that, if the Secretary has as much difficulty administering the Act for the next nine or ten months which runs through the whole crop season, both the livestock and crops, and we accumulate greater inventories and the Commodity

Credit Corporation becomes the chief holder, and that means, when they lend on the crop, it is a purchase agreement and they take title, then that, of course, would weaken the program, but it won't collapse. We have too much money in the Treasury yet, and so it wouldn't collapse. We would find ways of supplementing the income in some other way, but it would change the supporting program somewhat, and besides it is only 1950, and 1952 is still coming. (*Laughter*)

Question: I would like Mr. Hildebrand to answer a question for me. Assuming that the coal strike goes on and we continue to have confusion on the farm program, just what the farmer is going to be saddled with, is there a possibility that he will just sit on his liquid assets and your sowing season will go by with virtually no business?

Mr. Hildebrand: I don't think so. We never know what the farm business is going to be until after the month of April. That is so in normal times because there is a definite seasonal aspect. I have tried it in many ways, and you can take every year's business and almost lay charts one over the other, and you would consider them all one and the same. We sell about 35% of our tractors beginning the middle of February, but for after March 1 delivery. That is when the farmer wants them, after the personal property tax man has been around. He doesn't want a new tractor there before March 1. After March 1 it is all right. The farmer is going to buy equipment and he is going to wait until the last minute and then flood us with orders. I don't mean he is going to buy as much as he did in 1949 when we were filling up a backlog of demand, and there is going to be some redistribution of our pattern for a distribution of machines, because we will have corn machines in areas that never raised corn, and we are going to have, as indicated by my story on the potato machine, potato machines in the Corn Belt, and so we don't know what they are going to buy or where they are going to ask for it.

Question: My point was that the coal strike and these things may delay them until the 15th of June, and they might not buy at all.

Mr. Hildebrand: That could be, but we have substantial inventories out here. We have to build ahead. We build on tractors from June of each year clear through to March. We have to build that inventory. We have to gamble in this industry because it is seasonal. We have to have a start. If we don't have it then, we never sell. We have the goods this year. It cannot affect us in 1950, but it might cause us to carry a lot of inventory to 1951 if they didn't buy.

Mr. Peck: Could I comment on this matter of potatoes in the Corn Belt? I doubt very much if you will see any appreciable expansion quickly of potatoes in the Corn Belt. In the first place, where you grow corn you do not grow potatoes. One is a cool climate product; the other, of course, is a hot weather product. People on cheaper land in northern climates can produce potatoes much better, of much better quality, at less cost. I think it might be an exceptional grower that thinks he might come in on the guarantee for next year, but I doubt if you will see any great expansion from that standpoint.

Question: This is not a question, but I have heard two references to the coal strike. The evening papers carried

the headlines that the United Mine Workers have been declared not in contempt.

Question: Mr. Peck, to what extent do you think that the administration will be able to restrict acreage, that is, put those restrictions on, going back to the AAA days regardless of what he gets, before the farmer will rebel?

Mr. Peck: I think on some commodities it is easier to make a restriction of acreage, so far as that commodity is concerned. I think you can do it a little more effectively with cotton. I do not see how you could do it effectively and administer it and police it in corn, and there is no way I know of compelling the farmer to take his best acres out of that particular commodity or restricting him from producing something else, unless you are going to set up finally an individual farm land by governmental authority and dictation in which they write the plan and they write the ticket and, I presume, guarantee the farmer's income. That, I think, would not last very long from several points of view.

Question: Isn't that political dynamite for this present administration?

Mr. Peck: Yes, I think it would be political dynamite. I think it would undoubtedly tax the Treasury so that almost everybody would be opposed to it, and I think it would probably kill the price support idea almost entirely. Then I think it might come to the collapse that you mentioned, not in six months, but after a trial period.

Chairman Weedon: Our time is running out. We will have time for about two more questions. Just at this point, I want to remind you that these comparisons of the various agricultural plans are on the table, and you are welcome to take one or more copies if you wish.

Question: I would like to ask Mr. Peck what action would be taken against the support bill if Congress refuses to grant everything that Commodity Credit Corporation requests this time?

Mr. Peck: Do you mean the capital that they are requesting?

Question: Yes, the \$2 billion more.

Mr. Peck: They want \$6 billion in place of \$4 billion.

Question: What happens if they only get half of what they ask?

Mr. Peck: I think, if they get half of what they ask for and they get in a pinch and ask for more, they will get it. That is about the way I think Congress acts. What did Congress do with the potato deal just recently?

Now, don't blame the Secretary for the potato deal. He is having more fun with that than anything else I know of, but Congress, I think, will be rather eager to do what they believe is the expedient thing for agriculture. I hope I don't make the headlines, and perhaps I should not be that vigorous in the statement, but that is what I think anyhow.

Question: Didn't they say in the newspapers that the potato surplus was used as propaganda for the Brannan Plan?

Mr. Peck: Yes, I have heard that. I would just as soon see Brannan try out his plan on potatoes, provided he puts in writing the things that he has been saying and I would have some way of holding him responsible. I don't see how he can do it, but that is what he says.

Question: Mr. Hildebrand, we have heard so much about

the fact that, from the long-range point of view, tractors, for example, as you gave the figure, are 83 per 100 farms in the Corn Belt, and only 18 per 100 in the South. What I would like to know is, how do you expect that the tractor density down there is going to be raised? How are these people going to pay for them?

Mr. Hildebrand: As I pointed out in my talk, wherever the tractor is accepted, you generally find a consolidation of farms, combining of the smaller units in order to make tractor farming possible and profitable as an investment. I think that is the trend that will have to come in that area.

Question: Do you feel that is going on today?

Mr. Hildebrand: To some extent, yes. You know we had a little over 6½ million farms, and it is now just a little under 6 million. I think it is happening.

I stopped in a farmer's place one day. I knew this fellow only farmed 40 acres, and he had three tractors on the farm. I said, "My goodness! You don't use three tractors, do you?"

He said, "No, but a fellow can't farm with one tractor."

I said, "You can't?"

He drove home to me this one fact—the animal power is gone, and he said, "I have got my tractor hooked on to a corn picker out there in the field, and I couldn't unhook it each time I wanted to haul a load of corn into the crib. So," he said, "we exchange work with our neighbors."

You can recall the day, if you have been around farms, when, if we didn't own a sulky rake or a mower or some other item, we would go over to the neighbors and borrow it for a few days, and that was fine for a period of time, but, as soon as you were able to buy your own, you equipped yourself, and I think that is what will happen with these farmers. There is going to be a depth of mechanization in addition to a tractor per farm. There has to be a team of horses on every farm to properly do transportation work, light jobs.

Question: Isn't there an opportunity for the farm implement companies to promote plans of a co-operative character like that? It would seem to me that they would be in a position to increase their sales by promoting this co-operation.

Mr. Hildebrand: Don't think for a minute that we have not got some aggressive boys out here selling tractors, that sell Bill Jones' son a tractor and a pickup baler and say, "You can pay for this by doing work for all your neighbors around here," and they do a lot of that.

Then, on some of these soil conservation programs, a group of farmers go together and buy a heavy piece of equipment, and of course they get state and Federal aid in many instances, and that is the way it is done, but I think we have a long way to go.

Chairman Weedon: I am sure these questions could go on for hours, but I am going to have to call a halt out of consideration for our speakers. Mr. Peck just got up out of a sick bed to attend this conference.

Mr. Peck: I am feeling much better since I have met this group.

Chairman Weedon: And he deserves a great deal of credit for that. I again want to thank you both for your courtesy in coming all the way to the big city to address this group, and we appreciate it very much.



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SINCLAIR.. REPORTS FOR 1949

SALES AND NET EARNINGS were the second largest in our history, exceeded only by the record year 1948.

EVENTS OF 1949 reaffirmed the important truth that there is a virile, militant competition in the oil industry, and that our economic laws are still paying the highest rewards to the low cost producer.

TRANSPORTATION—We are now beginning to enjoy maximum benefits from our vast network of products pipe lines, which have required large capital expenditures, but which result in low operating cost. It is doubtful that any other company is in a position to do a more economical job in transporting raw material to refineries and then moving products to markets.

MARKETING—We are reducing marketing costs by withdrawing from high-cost areas,

and concentrating in low-cost areas. We are constructing a sufficient number of new and modern Sinclair service stations throughout our preferred marketing area.

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OUR GOAL FOR 1950 is to attain the most efficient and economical operation of the immense facilities we possess in the best interests of stockholders, employees and the public. The Company intends to continue to press forward its important program of increasing its own domestic crude oil production.

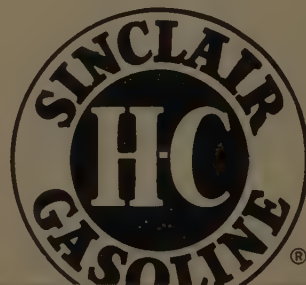
P. C. SPENCER
President

A TWO YEAR SUMMARY

	1949	1948
Net Income	\$ 54,073,338	\$ 81,048,602
Working Capital	192,670,120	187,922,695
Cash & Government Securities	133,586,973	138,062,802
Stockholders Equity	441,899,280	411,769,520
Book Value } Per Share	36.90	34.38
Net Income }	4.51	6.76

Copy of the 1949 Annual Report will be sent upon request.

SINCLAIR OIL CORPORATION
630 FIFTH AVENUE • NEW YORK 20, N. Y.



SINCLAIR
A Great Name in Oil

Outlook for the Petroleum Industry

THURSDAY AFTERNOON, MARCH 2, 1950

DONALD H. RANDELL, The Home Insurance Company, presiding.

Chairman Randall: It is a commonplace in Wall Street that the specialists in our profession are prone to be prejudiced in favor of their own particular groups. However, this concept is in contradiction to the even older adage that familiarity breeds contempt, as well as to my own convictions regarding the oil group.

OIL SECURITIES OVERRATED

It is my belief that oil securities are much overrated as investments that can be bought and laid away for eventual large-scale appreciation in value. Oil stocks as a group have been gradually losing ground against the general market since the summer of 1948. It is almost a certainty that problems now facing the industry will eventually be solved or will solve themselves if the law of supply and demand can be allowed to operate. But it takes a bold man to guess when the tide will begin to turn or, more realistically, when the stock market will decide that the ebb has been discounted. All I hope for is to be able to recognize the change when it comes.

I am reminded of a story told me shortly after I reported for my first job in a Wall Street bank. It seems that one of the hardy pioneers who helped build up that venerable institution fell ill while in his sixties and shortly thereafter married the young nurse who had been attending him. There was, at the time, the usual theorizing that accompanies such May-December unions, especially when the man is well off financially, but the old gentleman confounded the second guessers by living to the ripe old age of 104. He even kept on at the office six days a week until he was 102.

The point I am attempting to emphasize is the difficulty of predicting how far it will be into the future before that favorable long-term outlook will actually begin to materialize.

This timing is especially hard to gage in advance with such a complex and competitive industry as the oil business. It has world-wide ramifications, is a vital factor in military planning, and is about as important to our civilized way of life as is food or shelter.

It is my opinion that control over their own destiny is gradually passing out of the hands of the oil men themselves and is becoming vested to an ever greater degree in the hands of the Government at various levels. This trend that can be traced back to 1911 with the breakup of the old Standard Oil combine is not in itself necessarily harmful. We recognize the propriety and, in fact, the necessity for our national interests to be safeguarded, both within and outside of our continental limits.

However, we do question the increasing tendency of some administration appointees to assume the role of internal police in order to protect the public from the alleged greed of the "oil barons and the natural gas interests," whose

sole crime it is to be ready to supply fuel to the consumer at lower prices and with a great deal more consistency than does its competition.

We owe it to the investors we counsel, as well as to the way of life we are enjoying, to keep apprised of the major factors that will make for prosperity or poverty for the industry. We reserve the right as representatives of the owners of the oil industry to speak our piece either to oil company management, or to the management of the United States, whenever, in our considered opinion, the rules are too stringent or their observation too lax.

As I stated before, it appears to many of us that the eventual answer to "What's ahead for oil?" lies less in our oil fields and refineries and filling stations than it does on the floor of Congress, in the chambers of the Federal Power Commission, and in the big new fields of our good neighbors to the North. We are extremely fortunate to have with us this afternoon the men who know these subjects not by hearsay, but by actually being part of the picture themselves.

Our first speaker, Mr. John Herold, is a Yale graduate, a consulting geologist, has a very excellent reputation, and you will hear a great deal more of him in the future.

Mr. Herold.

* * *

Mr. John S. Herold: Mr. Chairman, ladies and gentlemen: I have been asked to talk about the operations and outlook for the domestic oil industry. Now, there are many important factors impinging on the oil outlook, and, unless we take them into account, I am afraid that we won't see very far.

So let's take a look at some of these factors. Our awareness of them, although it certainly won't tell us all that we would like to know, should sharpen our perspective and narrow the range of error in our thinking about the future of the industry.

BALANCE SHEET APPROACH

To simplify this examination I would like to use an approach that is familiar to all of you—the time-honored balance sheet. Our decision as to what factors on the industry's balance sheet will be classed as assets and what factors will be classed as liabilities will be governed by their probable influence on earnings. Favorable factors, or those tending to stimulate earnings, will be classed as assets. Unfavorable factors, or those tending to retard profits, will be designated as liabilities.

The liability items are real problems and much more difficult to evaluate than the assets. This is certainly different from the usual balance sheet where the liabilities are pretty much cut and dried figures, with the statement of assets requiring the major part of your research endeavor.

Because the liability side of the industry's balance sheet has a number of unpleasant items on it, let us look at it first. This is the page that has been making all the head-

lines recently and causing so much concern over the future of the American oil industry.

The first item heading this list is the world's greatly expanded capacity for producing crude oil. For an individual company you generally regard this as a very important asset. But for the industry, and particularly at the present time, I think it is a liability. It creates a surplus of crude products and brings about a weakening in the entire price structure and, finally, a shrinkage in oil company earnings.

The world's productive capacity is still expanding, in the Far East, in the Middle East, in the United States, and at a phenomenal rate in our neighbor country to the north. There, thanks to an enlightened and friendly government, United States companies are very well represented. You will hear more of Canada later from Dr. Hume.

In summary, the industry's supply problem is no longer one of planning synthetic plants but rather of avoiding a condition that sees someone proposing that the Government stockpile surplus petroleum products with dried eggs in a Missouri cave. The rising tide of imports is probably the second most disturbing liability on the balance sheet of the industry. This condition stems from a number of causes, including the expanded crude and products capacity throughout the world. It is particularly disturbing to that group of companies whose production is confined to the United States, and it is also disturbing to the industry at large, which historically has been a substantial exporter on balance.

An additional cause for concern is the possible impact of imports on the domestic crude price structure. Although the importing companies have a very large stake in the industry right here at home, we must not for this reason credit them with the power to calculate precisely just how much they can burden the domestic market short of cracking the price structure. A miscalculation can easily be made. You will have an opportunity to hear more about imports from Mr. Ellis.

A recent addition to the industry's list of liabilities, and one that may accelerate the flow of oil into the United States, is the progressive shrinkage in foreign markets. This shrinkage is presently speeding up. It stems from a number of causes: the surplus of oil, monetary problems, and the increasing degree of petroleum self-sufficiency among other nations of the world. How far this loss of markets to U. S. companies may carry is difficult to foresee. It seems to me, however, that, with the U. S. companies controlling large quantities of cheaply producible oil in many parts of the world, they are in a good position to do something about this matter.

Another liability and one that will probably remain on the balance sheet for a long time to come is the trend to increasing taxation. Last year the tax burden on crude oil and products was more than \$3 billion. In terms of domestic crude oil production, this is equivalent to about \$1.65 per barrel. A reduction of 50% in the statutory depletion allowance, which even now is being considered in Washington, would raise this figure to \$1.70 or \$1.75 per barrel. The various states are also nibbling away at the petroleum pie. The sum and substance of this nibbling is toward a

reduction of both oil company earnings and dividends to investors.

The last liability, and one we cannot overlook because it throws a lot of uncertainty into the future, is that of state and Federal control of the oil and gas industry.

The foregoing represents the more significant long-term liabilities which we can read on the industry's balance sheet at this time. The manner in which these problems are worked out will have an important influence on the trend of oil company earnings over the future.

Now let's take a look at the industry's assets—the good news on the balance sheet which a lot of us have almost forgotten about.

First of all, there is the prospect of an expanding domestic market for petroleum products. This expansion stems from the increasing number of petroleum-consuming units as a result of our growing economy. The chronic paralysis afflicting the coal industry is also a factor. Automobiles, trucks, tractors, space heaters, and oil burners are on the increase. For gasoline alone, which is the most important of the petroleum products, we can see a probable increase in domestic demand of 5% a year. The mass escape of coal consumers to the relative sanctuary of the oil industry is also bolstering domestic petroleum demand. To cite but one example, fuel oil consumption by utility power plants reporting to FPC jumped 83% in December 1949 over December '48. There is little or nothing in the news that would suggest that the flight from coal has yet run its course.

A second favorable factor among the assets, and not to be overlooked in evaluating the future, is the vigor and enterprise of the American oil industry. Its flexibility and response to changing conditions has been demonstrated in the past. Its ability to develop new products and new markets is well known to you. Oil and gas are unique substances. In the hands of an enterprising industry they will afford new avenues for profit in the future.

An expanding supply of sweet crude oil is another asset of the industry. It provides a premium charging stock for refinery operations and permits a greater recovery of profitable products at lower cost. Important new fields in the United States contributing to this supply are the discoveries in the Cuyama Valley in California, the Elk City field in Oklahoma, the Pegasus field in west Texas, and, most sensational of all, the reef field stretching across Scurry County, Tex. Recoverable reserves in this field alone already approximate 1¼ billion barrels, and the end is not yet in sight.

Digressing for a moment, I think that these discoveries point to a tremendous remaining discovery potential for the United States and spell out again that the important ingredients in the discovery formula are economic incentive, advances in geological and engineering technique, and large measures of persistence and good luck.

There is no shortage of areas in which to look for oil. The Cuyama Valley discoveries are in a region whose possibilities were clearly recognized and published in 1915. The Pegasus field is located in a deep trough, where prospects have long been regarded as highly favorable, but the price of oil, until recently, was too low and drilling difficulties too great to justify the expense of finding and developing oil

here. The Scurry field, embracing over 60,000 acres, is in a county which the industry has been probing with fluctuating interest and effort over the past thirty years.

Expansion in the use of natural gas is the final item I would place on the asset side of the industry's balance sheet. Some of you probably wonder about this. You have heard about the tremendous inroads that natural gas will make into fuel oil markets. But it must also be remembered that natural gas is owned and produced in very large measure by the various oil companies. The substitution of gas for oil can be regarded as a swapping arrangement, involving temporary dislocations in the oil economy and even some loss of profits. Where the oil industry stands to gain, however, is in the capture of those markets now served by other fuels, notably coal.

The possible effect of outside supervision on the industry's natural gas operations will, I believe, receive the expert attention of Mr. Falck in just a few minutes.

Having considered the longer-term factors in the oil outlook, let's take a quick look at 1950. 1948 and '49 were years of transition from scarcity to abundance. 1950 will see a continuation of this trend. The outlook for oil company earnings is for a further retreat from the peak of 1948. It's pretty early in the year to be accurate, but my present guess is that net earnings will be less than those of 1949, maybe as much as 20% for some companies.

Important things to watch are crude and product stocks, particularly gasoline; the trend of imports and exports; the tank wagon prices of products; the unpredictable weather; and, of course, general business activity.

What will happen to the price of crude over the near future? The price is very definitely under pressure, and many low-gravity oils yielded to this pressure in 1949. The most important single factor tending to sustain the present crude price is the Texas Railroad Commission, which has thus far successfully confined the crude oil surplus in this important state to its proper place of storage underground.

With respect to product prices, I think that all of us are inclined to look too much at refinery prices, when we should be more concerned with the tank wagon or wholesale price to dealers. It is the tank wagon price level that determines the profits of the integrated companies.

To conclude, I think that all of you will realize that the industry's readjustment is not a simple one. It will be accompanied by many changes among individual companies. These changes, in the final analysis, are what you are looking for, and they will, I am sure, present some interesting investment opportunities.

I thank you. (*Applause.*)

* * *

Chairman Randell: Mr. Ned Falck got out of Columbia, and I think he moved right on down to Washington and has been there ever since in consulting capacities on utilities and on natural gas. He is now a consulting engineer. He is very highly thought of; he knows the situation intimately. Mr. Falck. (*Applause.*)

* * *

Mr. Edward Falck: Coal, oil, and natural gas are competing fuels. This central economic fact must be recog-

nized in the formulation of Federal policy. The major factors affecting interfuel competition are: (1) energy content, (2) efficiency of combustion, (3) continuity of supply, and (4) price. For the years 1946 and 1949 the total energy supply of the United States as reported by the U. S. Bureau of Mines was subdivided among the principal energy sources as shown in Table 1.

TABLE 1

	1946	1949
Coal	48%	38%
Oil (Including imports)	35	39
Natural gas	13	18
Hydroelectric power	4	5
Total	100%	100%

Since the end of the war natural gas and oil have expanded their markets at the expense of coal. Because of continually advancing production costs, coal has been priced out of many markets. According to a statement by Dr. James Boyd, Director, U. S. Bureau of Mines, on January 25, 1950:

Production of bituminous coal and lignite dropped from an all-time peak of 631 million tons in 1947 to 600 million tons in 1948 and further to an estimated 435 million tons in 1949. The latter is the lowest annual production since 1939.

On February 3 the Federal Power Commission reported that coal consumption by electrical utility power plants during 1949 had dropped 15.6% below the record use of 1948, while fuel oil and gas consumption set new records. The release stated:

The use of coal in 1949 totaled 84,071,523 tons, which compares with 99,586,341 tons consumed in 1948. Fuel oil requirements in 1949 were 66,302,548 barrels, exceeding 1948 requirements by 55.5 percent, and gas consumption totaled 549,888,635,000 cubic feet, 15 percent above 1948.

In recent months there has been increasing concern expressed by certain elements in the oil marketing industry about the inroads being made by natural gas on the market for heating oils. On January 17, 1950, the Secretary of the Interior, Oscar L. Chapman, in response to a proposal made by a member of the National Petroleum Council, sent a letter to its chairman, Mr. Walter S. Hallanan, suggesting that a study be made regarding the "interrelationships between the expanding use of natural gas and the domestic production, refining, and marketing of crude oil and its products with particular reference to light and residual fuel oils." Quoting further from Secretary Chapman's letter:

Therefore, I welcome the proposal made in your letter, and I am pleased to request the National Petroleum Council to appoint a committee to study supplies of and requirements for natural and manufactured gas and heating and fuel oils by geographic areas and by classes of uses. In the event the National Petroleum Council decides to undertake such a study, I shall also request the National Bituminous Coal Advisory Council to make a similar study with respect to solid fuels.

I should hope that means will be found to frame these studies upon common sets of assumptions with respect to scope and relevance of the level of national economic ac-

tivity in its various sectors, and to otherwise ensure that the individual studies will be sufficiently coordinated that they can be brought together to form a sensible whole. To assist in attaining these objectives, I shall be glad to have one or more of my staff attend meetings of your committee.

The natural gas industry has undergone a tremendous and continuing expansion since the end of World War II. Many complex and interrelated factors have been responsible for this expansion. Wartime restrictions on the use of coal and oil to domestic users made many people aware of the advantages of natural gas for house heating. Since the end of the war, coal and oil prices have advanced generally by 50% or more while prices for natural gas have remained relatively stable.

WHOLE ECONOMY PROSPEROUS

The whole economy has been prosperous, purchasing power has remained high, and the general public has begun to assert on a wide scale its pent-up desire for automatic heat. The growth in natural gas sales has been at the expense of manufactured gas, coal, and oil. Everybody, seemingly, has wanted to switch to natural gas, because natural gas is not only the most attractive fuel, but it is now generally the cheapest fuel in many areas for house heating and also for many commercial and industrial uses.

Today, the price of natural gas is far below the prevailing price levels of competing fuels. This is in part due to the fact that the Federal Power Commission adheres rigidly and, in the opinion of some experts, unrealistically to the cost basis of regulation. The Federal Power Commission has applied the original cost formula exclusively in its regulation of the wholesale rates of interstate natural gas companies. It can be easily demonstrated that this cost formula leads to absurd results when it is used as a measure of the value of natural gas produced in the field. The cost formula does not give full recognition to the value of producing acreage.

It may be noted that natural gas is the only one of the three competing fuels whose value at the point of production is today regulated by the Federal Government. The Federal Power Commission cost formula has resulted in allowing some integrated natural gas companies an equivalent field price of less than 5 cents per thousand cubic feet of gas, which is equivalent to less than 35 cents per barrel of crude oil. In still other cases, the Federal Power Commission has allowed an integrated pipe line company to charge on its books, as the value of its own self-produced natural gas, a rate of less than 2 cents per thousand cubic feet, equivalent to less than 14 cents per barrel of crude oil. At the same time, the Federal Power Commission permits the same natural gas company to charge as an operating expense several times as much for gas purchased from other producers.

The natural gas and oil industries have many similarities and a few dissimilarities. It is well-known that oil and gas are found to exist separately and in combination. Many times natural gas has been discovered in drilling for oil. Under recently developed technological processes, oil can be converted into various liquid petroleum products. Both oil and gas can be transported in pipe lines. Both oil and

TABLE 2

City	Fuel Oil, Cents per Gallon	Equivalent Price, Cents per Million Btu
New England		
Boston, Mass.	11.9	85.6
Manchester, N. H.	12.6	90.6
Portland, Me.	11.9	85.6
South Atlantic		
Jacksonville, Fla.	12.5	90.0
Norfolk, Va.	11.0	79.9
Richmond, Va.	11.2	80.6
Savannah, Ga.	12.6	90.7
Pacific Northwest		
Portland, Oreg.	11.6	83.5
Seattle, Wash.	12.6	90.8

TABLE 3

City	Natural Gas Rate for House Heating, Cents per Million Btu
Washington, D. C.	110.5
Atlanta, Ga.	51.2
Pittsburgh, Pa.	48.6
Cleveland, Ohio	51.2
Cincinnati, Ohio	58.4
Detroit, Mich.	70.0
Kansas City, Kans.	45.1
Houston, Tex.	54.4
New Orleans, La.	56.0
Memphis, Tenn.	56.4
Mobile, Ala.	52.9
Denver, Colo.	45.1
Los Angeles, Calif.	46.3
San Francisco, Calif.	34.8

gas can be consumed efficiently for a wide variety of residential, commercial, and industrial heat and power uses. Both oil and gas have large present and potential uses in the manufacture of various chemicals.

Because of its liquid form, oil can be transported by tankers, tank cars, and trucks, whereas gas cannot. Also, oil can be stored fairly easily close to the point of use, whereas this is difficult with natural gas. Because of the storage factor, oil can often be used to relieve the peak load problem of natural gas systems, a problem that is becoming more acute as space heating saturation increases. Oil is used as a stand-by fuel by large users who purchase gas on an interruptible basis.

Natural gas is today being distributed in all parts of the United States with the exception of just three regions—New England, the Pacific Northwest, and some of the South Atlantic States, including Virginia and the Carolinas. Plans are now under way for bringing natural gas into these regions also and several major natural gas pipe line applications are now pending before the Federal Power Commission.

What will the effect be of the availability of natural gas in these areas on markets for fuel oil? Natural gas may not encroach so much on existing markets for heating oils, but it will obviously be an important competitor for all potential new business. Let us compare the prices of no. 2 fuel oil (heating value 138,500 Btu per gallon) in these prospective new natural gas areas with typical prices for

natural gas sold in other areas for residential house heating. The retail prices of residential heating fuels as of December 15, 1949, are given in Table 2.

In contrast to these prices of fuel oil for residential heating, Table 3 gives the prices charged for natural gas as of December 1949.

In Detroit, Mich., where natural gas for house heating is selling at a rate equivalent to 70 cents per million Btu, no. 2 fuel oil for residential heating was selling at 12.9 cents per gallon, equivalent to about 93 cents per million Btu. As of August 1, 1949, there were about 85,000 gas house-heating customers in Detroit. Between that date and January 1950 it is reported that some 95,000 gas applications for house heating have been filed. Thus, the total number of customers using natural gas for house heating will probably have doubled in less than a year.

This development is due partly to the coal strike and partly to the availability and relative cheapness of natural gas. Panhandle Eastern Pipe Line Company receives slightly less than 19 cents per thousand cubic feet for natural gas that it delivers at wholesale to Michigan Consolidated Gas Company, the distributing company in Detroit. This wholesale rate of about 19 cents per thousand cubic feet would be thermally equivalent to no. 2 fuel oil selling at about 2.64 cents per gallon or no. 6 oil selling at 2.88 cents per gallon. The lakeport terminal price of no. 6 fuel oil in Detroit as of February 6, 1950, was 7.1 cents per gallon.

Michigan Consolidated Gas Company is also supplied by the recently constructed Michigan-Wisconsin pipe line, but this Michigan-Wisconsin gas comes to the Detroit city at a price of around 30 cents per thousand cubic feet, some 50% more than the rate charged by Panhandle Eastern.

Even if natural gas is brought into new areas at a wholesale price of around 30 cents per thousand cubic feet, it will give stiff competition to the fuel oils. Natural gas at 30 cents per thousand cubic feet is equivalent to no. 6 fuel oil at about $4\frac{1}{2}$ cents per gallon or \$1.89 per barrel. According to the *National Petroleum News*, Table 4 gives prices in effect February 6, 1950, for no. 6 fuel oil (FOB refineries and tanker terminals).

TABLE 4

New York Harbor	\$2.05-\$2.15
Boston	2.10
Jacksonville	2.02
Norfolk	2.08
Savannah	2.03

It may be seen from the foregoing that the present prices for fuel oil in New England and the South Atlantic States are considerably higher than present prices charged for natural gas in other parts of the country. It is too early to predict the levels of wholesale and retail rates that will be charged for natural gas in these areas, but it seems probable that there will be some spread in prices favoring the use of natural gas as against oil for many heating and power purposes.

According to recent releases made by the Federal Power Commission and by the American Gas Association, gas in-

dustry expenditures for construction of new facilities and expansion of present facilities in 1949 reached an all-time high of some \$940 million. It is estimated that about \$1.8 billion will be spent by gas companies in the next three years. The completion of this tremendous natural gas expansion program cannot fail to have a very important effect on oil markets. It seems clear to me that this situation, which is fundamentally due to the wide disparity between oil and gas prices, can only be resolved by a decline in oil prices, an increase in natural gas prices, or a combination of both these types of adjustment. The timing and extent of such price adjustments should be left to the interplay of economic forces—that is, to normal business competition. The price required in one locality at one particular time will be quite different from what will be required in another locality at a different time. I personally think that the solution must be found through the normal play of free competition.

The only alternative means of settlement would be by governmental allocation of markets. Such allocation would inevitably require governmental control over end uses and governmental decision, not only as to how much gas or oil should be made available to particular regions, states, counties, and cities, but also as to the various classes of users, segments of industry, and individual customers. The question arises, "Can the Federal Government successfully carry out any such stupendous program?" The welfare of the whole economy is more likely to be promoted by continuing to permit interfuel competition than it would be by any attempt at over-all governmental regulation of the fuel industries.

Recently, Congressman Heselton of Massachusetts introduced House Resolution 466, calling for the formulation of a national fuel policy. A similar resolution was sponsored by Congressman Heselton in the 80th Congress. Earlier this year Representative Harris of Arkansas proposed the creation of an interdepartmental committee whose duty it would be to make a study for the purpose of recommending a national fuel policy.

During recent years Congressional committees have been giving consideration to various proposed amendments to the Natural Gas Act. These amendments have been directed toward limiting the jurisdiction of the Federal Power Commission with respect to the production and fathering of natural gas. Some of the amendments that have been proposed would exempt from FPC jurisdiction so-called independent producers who sell gas at arms' length to interstate pipe lines, but at the same time would keep within the control of the Commission the production and gathering functions of the interstate pipe lines that produce part or all of their own supply of gas. If any such distinction is drawn and if the Federal Power Commission continues to evaluate the gas owned by regulated pipe line companies on a *cost* basis, the long-term result will be a fairly complete divorcement between the functions of production and gathering, on the one hand, and transportation, on the other. Integrated pipe lines would be compelled to make every effort to divest their holdings of gas reserves and production facilities. New pipe lines constructed would in all cases be nonintegrated transportation companies.

The records of the Federal Power Commission will show that, since the adoption by the commission of the original cost formula and its application to the valuation of pipe line company reserves, there has not been constructed a single new interstate pipe line owning its own reserves. If there were to be a continuation of this policy of applying the original cost formula to pipe line reserves, then I think that the interstate pipe lines should be afforded an opportunity to sell off the gas reserves they now own. In support of this conclusion may I refer to a very recent case, Federal Power Commission versus Panhandle Eastern Pipe Line Company, decided by the Supreme Court June 20, 1949? The Court expressed itself in this language:

As we have held above that the transfer of undeveloped gas leases is an activity related to the production and gathering of natural gas and beyond the coverage of the Act, the authority of the Commission cannot reach the sales. A proposed transfer cannot be stopped by the Commission. It should not be permitted to delay what it cannot prevent.

A great number of leading oil companies hold very substantial natural gas reserves. An estimate made for 1947 showed that 33 leading oil companies held some 116 million acres of gas reserves, or 62.5% of the total acreage. In the case of many of these large oil companies, earnings from the sale of natural gas represent a substantial percentage of their total earnings. These companies will, of course, benefit from the further expansion of the natural gas industry, either through continuing the sale of natural gas produced by them, or through the sale of their natural gas properties in the event they divest themselves of these properties. I do not believe that the public interest should require oil companies to sell their gas production properties. Nor do I believe that the public interest should require integrated natural gas companies to sell their gas holdings. From an operating standpoint, a pipe line holding substantial reserves of its own can be operated better and with more flexibility than another pipe line that purchases its entire gas supply from the outside. The pipe line owning reserves will be in a better bargaining position to purchase gas, the same as companies producing and purchasing other raw materials.

There is presented here both a jurisdictional and a rate making problem. The independent producer of natural gas who has no interstate facilities or operations whatsoever believes that he is entitled to be exempt from the regulatory jurisdiction of the Federal Power Commission. The integrated, interstate natural gas company believes that it is entitled to at least a normal competitive field price for the gas produced from its own wells, even though today the competitive field price may be substantially greater than original cost of the gas to the present owner.

Basically, the production of natural gas is a mining operation and is comparable to the production of oil, coal, or copper. Risks are involved in the exploration and development of natural gas, and the investors who take these risks feel that they are entitled to a commensurate reward when they are successful.

If the Federal Power Commission and the Congress find a sound solution to this jurisdictional and rate making question involving the value of natural gas produced in the field, this solution will go a long way to reduce the abnor-

mal severity of present-day competition between gas and oil. This competition works both ways.

I believe that, under fair competitive conditions, natural gas and oil prices will come into balance in the field and in the various markets in the consuming states. This balance, arrived at through normal competitive conditions, will be much sounder and more to the public interest than any artificial "benefits" that might result from complete Government control of the fuel markets.

The decision as to which fuel is necessary or appropriate to his use should be left to the consumer. Except in time of war or national emergency our American economy can still afford to respect "consumers' choice"! (*Applause.*)

* * *

Chairman Randall: I hope you see the way this forum has been set up. We are trying to take a look at the oil industry, a look at the paramount thing that can affect the oil industry internally, which is natural gas, and now we are going to get on to the international aspects.

I don't think that Dr. Hume really needs to be introduced. He is known as the "grandfather"—you will pardon the expression—of Canadian geologists. He is possibly the most famous man in Canada when it comes to discussing oil and gas, as well as the nonferrous metals they have up there. I am very happy and pleased to be able to introduce Dr. George S. Hume, who is the director general of the Scientific Services of the Canadian Department of Mines. (*Applause.*)

* * *

Dr. G. S. Hume: The petroleum resources of any country are directly related, not only to the extent, character, and volume of the sediments in which petroleum may occur, but also to the environmental and climatic conditions under which the sediments accumulated and to the degree of metamorphism following deposition.

THE PROSPECTIVE OIL AND GAS AREA

In the formation of the North American continent there have been many important changes throughout geological time. The oldest rocks in the Precambrian Shield in the northern part of this hemisphere form a V-shaped mass devoid of all petroleum prospects. But to a large extent this mass controlled and determined the adjoining basins of sedimentation as well as the subsequent lines of deformation where the yielding of the earth's crust to orogenic forces gave rise to the mountain ranges of the Cordilleran system.

Thus the favorable area for petroleum and natural gas search in western Canada is within the belt of sedimentary rocks that regionally increases in thickness westward and extends from the west boundary of the Precambrian Shield and terminates in the highly deformed and more strongly metamorphosed sediments found along the eastern edge of the Cordilleran system but perhaps includes some less disturbed intermontane basins. This great area, 800 miles in width at the United States-Canada boundary, gradually narrows northward but extends 1,550 miles northwest to the north edge of the continent and includes some of the western Arctic islands. In all it embraces approximately

684,000 square miles of sedimentary rocks with prospects more or less favorable for oil and gas occurrences. It is in reality the northern extension of the Great Plains of the United States, and the seaway in which much of the sedimentation occurred extended intermittently throughout the Paleozoic and Mesozoic eras from the Gulf of Mexico to the Arctic Ocean.

The general conditions of sedimentation are, therefore, related to those in the north central and northwestern Plains areas of the United States, but in detail, in such a vast area, there is a wide variation, both in types and character of sediments, and in local structural changes. These are the conditions that largely determine the locus of oil and gas fields.

EARLY DEVELOPMENTS AND THEIR SIGNIFICANCE

Historically the search for oil and gas in western Canada is very interesting. Oil seepages occur in the area west of Waterton Lakes close to the International Boundary in southwest Alberta. In the early ranching days of the West, oil was obtained from one or more of these seepages by soaking it up and squeezing it out of blankets. The rocks from which the oil exudes are hard quartzites and argillites, and, although in the early days these were regarded as Carboniferous, they are now known to be Algonkian.

It was not until the great Lewis overthrust in Montana was described by Bailey Willis in 1902 that the true nature of the structure was understood, but it is now recognized that the Algonkian rocks are part of a great mass that was thrust northeastward over younger strata of Mesozoic and Paleozoic strata. The oil presumably originates under the overthrust block and escapes through it in joints and cracks to issue in the seepages.

The early wells which commenced drilling in this area in 1902 did not encounter commercial supplies, but one well near the east edge of the overthrust mass penetrated it into underlying Mesozoic sediments, although this was not then understood. In view of the later developments that occurred first with the discovery of oil and gas from the Paleozoic (Mississippian) limestone of Turner Valley in 1924 and recently the discovery of the Pincher Creek gas distillate field only 15 miles from the original wells, the early events have a particular significance in indicating the productive oil and gas prospects of overthrust masses in which the structural conditions are drag folds above overthrust faults.

THE OIL AND GAS AREAS IN THE FOOTHILLS BELT

To date the Turner Valley field, the first to be developed in the foothills beginning in 1924, has yielded about 100 million barrels of oil and 1.4 trillion cubic feet of gas and still has a reserve of perhaps 25 to 30 million barrels of oil and recoverable gas reserves of 250 billion cubic feet. The Geological Survey of Canada has not made an appraisal of the gas reserves of the Pincher Creek structure discovered in 1947, but these are said to be of the order of 1.5 trillion cubic feet with a very considerable condensate content. Another field, Jumping Pound, discovered in 1944, 20 miles west of Calgary, has a gas reserve of nearly 1 trillion cubic feet. It is somewhat similar in type to Turner Valley and Pincher Creek, but, whereas Turner Valley has crude

oil below a gas cap, both Pincher Creek and Jumping Pound have only gas with condensate, and the amount of condensate per unit of gas in the Jumping Pound structure is considerably less than that of Pincher Creek field. Thus, new development in the foothills where wells are deep and expensive need the stimulus of a market for natural gas beyond that now available in Alberta, since both Jumping Pound and Pincher Creek at present have no market outlet.

In assessing the prospects of the foothills, it should be remembered that, although the Foothills Belt is narrow, perhaps on the average only 15 to 20 miles wide, yet it extends along the east side of the Rocky Mountains 900 miles northwestward from the International Boundary across southwest Alberta and northeast British Columbia to the Liard River in the Northwest Territories. At the Liard River the trend is interrupted by a mountain range en echelon to the east, and in front of this extending northward through the Mackenzie River valley there are no foothills similar in type to those farther south. It is by no means certain either that the foothills in British Columbia are structural replicas of those in southern Alberta, as broad folds with flat tops and steeply dipping east and west flanks are present along the upper Peace River in British Columbia.

At the present time the most interesting well being drilled is the Lone Mountain structure in British Columbia 85 miles south of Peace River and 50 miles southwest of Beaverlodge, Alberta, along the Monkman trail. The structure is a faulted anticline, and on the south end there is a very large gas seepage with an ethane content of more than 12%. The foothills area in British Columbia is 450 miles in length. Very little of it has been systematically mapped, although traverses have been run along river valleys, and some studies have been made along the Alaska Highway from Dawson Creek to Fort Nelson and thence to Watson Lake.

There is no doubt the foothills offer excellent prospects, particularly for gas and light oil, and, although the fields so far developed have proven very productive, the costs of finding them have been high. The structures tend to be long and relatively narrow, but with large closures. Turner Valley, for example, has a productive closure within the gas and oil zone of slightly more than 5,000 feet, whereas the productive closure in the Jumping Pound field is about 1,000 feet, and in the Pincher Creek field it is approximately 500 feet. In these deep fields also, pressures are high, and gas could be delivered to pipe lines for long periods of production above pipe line pressures. Much of the gas has a sulfur content which would have to be removed, as would also the distillate content.

THE PLAINS AREA

The area of the Great Plains in Manitoba, Saskatchewan, and Alberta, is approximately 475,000 square miles, but, along the eastern edge where the sedimentary rocks lie on the Precambrian, they are too thin to have any oil and gas prospects. Most of the area, however, is overlain by Mesozoic or younger strata, and the thickness is considerable. Drilling has reached the basement rocks in a few wells, and hence the stratigraphic section is known in these places. The information is sufficient only to indicate wide varia-

tions in sedimentation and to show the presence of local basins not evident from surface examination.

For example, in southern Saskatchewan extending into southwestern Manitoba there is the northward extension of the Williston Basin of the United States. A well in the southwestern part of Saskatchewan in this basin reached the basement rocks at a depth of about 9,000 feet and revealed a section in the Paleozoic much different from and much thicker than was suspected to be present from outcrops that can be studied along the edge of the Precambrian Shield in Manitoba. It is, therefore, inferred that toward the edge of the basin in southwestern Manitoba there is a very considerable thinning and wedging of Paleozoic strata under conditions quite favorable for oil and gas accumulations. Recently some leasing and drilling activity has occurred with the object of testing these conditions, but the information to date relative to the size of the area to be investigated is very restricted and inconclusive.

In southern Alberta the first Devonian oil was found in the Princess area in 1944. In a well drilled in 1939 oil shows and gas flows had been encountered, and this well reached the basement rocks at a depth of 6,147 feet after penetrating 2,911 feet of Paleozoic strata. In central eastern Alberta in the Provost gas field a well drilled in 1946 reached the basement rocks at a depth of 6,968 feet and indicated a thickness of 4,023 feet of Paleozoic beds. This well gave further confirmation of conditions that had been indicated by previous drilling: namely, that in east central Alberta extending into western and southern Saskatchewan there is a great basin with salt beds up to 1,000 feet in thickness which in places as at Unity, Saskatchewan, are overlain by potash beds.

PROSPECTS IN MISSISSIPPI STRATA

In the eastern part of the Plains area Devonian strata directly underlie Mesozoic beds. The top of the Paleozoic was an erosion surface beveled toward the northeast, and, in consequence, progressively younger Paleozoic beds occur to the southwest under the Mesozoic cover. This may have great significance in respect to oil and gas prospects in the Paleozoic, since it results in not only a thicker Devonian section southwestward from the Paleozoic outcrops in Manitoba, but to the west and southwest the Devonian becomes overlain by younger Mississippian strata. The eastern edge of the Mississippian is believed to be present in southwestern Manitoba. The trace of its edge crosses southern Saskatchewan in a northwest direction and is present at the Saskatchewan-Alberta boundary about 150 miles north of the United States-Canada boundary. It then crosses Alberta in a general northwest direction but with some considerable irregularities.

Mississippian strata are present only a short distance south and west of Edmonton but are not present in the Leduc field. To the northwest of Edmonton the information in regard to the position of the edge of the Mississippian beds is even less definite than it is farther southeast. It is, however, known that Devonian beds were encountered in a well drilled east of the British Columbia-Alberta boundary northeast of Pouce Coupe but that Mississippian and perhaps Pennsylvanian beds are present in the mountains to the west and undoubtedly extend under the Plains

for a very considerable distance eastward from the mountains.

Outcrops of Mississippian strata occur on Liard River in the Northwest Territories south of Fort Simpson, but north of Fort Simpson Devonian strata are present at the surface, and there are no Mississippian beds east of the Mackenzie Mountains in the Mackenzie Basin, except perhaps in the extreme northwest part of Canada in the area adjoining the Alaska boundary. The straight line distance of the trace of the edge of the Mississippian beds from southern Manitoba to the area west of Fort Simpson where the Mississippian beds no longer occur under the Plains is about 1,200 miles. The actual trace with all the irregularities will, of course, be much greater.

The Mississippian strata have been demonstrated to be highly productive of oil and gas in such fields as Turner Valley, Jumping Pound, and Pincher Creek in the foothills, and some production has been obtained from them in the South Princess area of the Plains. The first indication that oil and gas might be trapped on their eastern edge by the overlapping Mesozoic strata was in a well drilled in 1930 at Oyen on the Saskatchewan-Alberta boundary. A good showing of gas with some oil was obtained, but no commercial production has been developed, although only one further well has been drilled in the immediate vicinity of the first well.

A further indication of oil and gas accumulation along the edge of the Mississippian was found in the productive Stanolind-Imperial Barrhead well, 55 miles northwest of Edmonton, completed in 1949 at a depth of 6,414 feet, but plugged back to the Mississippian oil zone at 4,117 feet. The well on test produced 36 barrels an hour of 23 gravity oil but was not entirely free of water. A further well in this area, O'Meara Barrhead, has now been completed, with a flow of oil of 30 barrels an hour and a gas flow of 2 to 3 million cubic feet a day. It seems likely at least a small oil field will be developed in this area.

These occurrences of oil along the edge of the Mississippian strata have indicated prospects throughout its whole length under local favorable structural conditions from southern Manitoba to Fort Simpson in the Northwest Territories. On the basis of imperfect knowledge of the stratigraphy, it is suspected that the northern and western areas may be more favorable than the central part. The conditions in the southeastern part are so inadequately known that it is impossible to evaluate them at the present time, but in this area the thickness probably decreases more rapidly than elsewhere, and the wedging of the strata toward the edge is a favorable condition for accumulation of petroleum and natural gas.

PROSPECTS IN DEVONIAN STRATA

Reference has already been made to the discovery of Devonian oil at Princess, 100 miles east of Calgary, in 1944 and to the basin containing thick salt beds in east central Alberta and western Saskatchewan. In the summer of 1946 I examined Paleozoic sections beginning in the type area of the Three Forks and Jefferson formations of the Devonian at Three Forks, Mont., and sections along the east edge of the mountains from the Crowsnest Pass area in southern Alberta to the Brule area, northeast of Jasper Park

and north of the transcontinental Canadian National Railway west of Edmonton.

There is a striking change in the sedimentation of the Devonian northward, and there is no doubt that these changes are associated with more favorable conditions for oil and gas occurrences. In the Brulé area, for example, coral beds in abundance are much in evidence, and strata of several feet thickness are composed almost entirely of coral and associated materials. There is a much greater prevalence, at certain stratigraphic horizons, of black shales and dark limestones in contrast to an association of red beds with fragmentation and brecciation in the Jefferson of the Three Forks area of Montana. This change northward appears to be particularly significant, in view of the fact that large oil seepages occur still farther north in Middle Devonian rocks on the north shore of Great Slave Lake and that the Norman Wells field developed under the Canol project in the Mackenzie River basin is a coral reef.

The Norman Wells field was discovered in 1920, and, during field work by parties of the Geological Survey of Canada in 1921 and 1922, outcrops of coral reefs were found in the North Nahanni-Roor Rivers area, northwest of Fort Simpson, and in the Redknife River area southwest of the west end of Great Slave Lake. The importance of these discoveries was not recognized at the time, since it was not known until the Canol developments were undertaken in 1942 that production at Norman Wells was from a coral reef.

The importance of these discoveries, however, is even more significant now in the light of the discovery of oil in a reef in the Leduc field near Edmonton in 1947 and the discoveries under similar stratigraphic conditions of the Redwater field in 1948 and Golden Spike Stettler and other fields in 1949. The outcrops of the reefs in the Redknife River area, southwest of Great Slave Lake, are approximately 570 miles northwest of Leduc and 365 miles south of Norman Wells. All these reefs so far discovered are in Upper Devonian strata, and, in view of the prevalence of coral beds in the sections at Brulé, west of Edmonton, it seems proper to infer that reefs may occur anywhere in the great belt of Upper Devonian under the Plains area from the Stettler field, 100 miles south of Edmonton, to and probably beyond the Norman Wells field in the vicinity of the Arctic Circle, a distance of approximately 1,000 miles in a straight line.

It should not, however, be inferred that throughout this vast area stratigraphic conditions will be found to be uniform. The reverse is undoubtedly true, and many areas may ultimately be found to be oil and gas productive because of special local conditions.

Already this has been proven by the discovery of oil in 1949 in Imperial Normandville well, 30 miles south of the town of Peace River and 210 miles northwest of Edmonton. This well on test flowed at the rate of about 120 barrels a day of 37.2 gravity oil from a depth of 6,740 to 6,745 feet after pipe preforation. It gave new impetus to extending the search northward into those areas beyond the fringes of settlements in the wilderness of muskeg and forest. This search is being extended outward from such roads as exist, as, for example, the Alaska Highway in British Columbia, where recently considerable acreage in the Sikanni

River area has been taken under exploration permit and along the road that extends from Grimshaw north of Peace River to Hay River post on the south shore of Great Slave Lake.

The Devonian discoveries in the Edmonton area have been so highly publicized that no detailed description is needed here. On the third anniversary of the discovery of Leduc on February 13, there were 372 producing wells in that field. The Federal Department of Mines and Technical Surveys has made no exact appraisal, but the recoverable reserves have been stated to be 250 million barrels, and this figure may be accepted as reasonably exact. To the north of the North Saskatchewan River, the Woodbend field has now been shown to be continuous with Leduc. Four miles to the west of Woodbend, there is the Golden Spike field, discovered in 1949 and now with three wells.

The surface area of this field has not yet been determined, but it may be only a few thousand acres, which is small in comparison with the surface area of Leduc and Woodbend combined. However, the importance of the field is in the fact that the productive zone in the discovery well had a thickness of 544 feet, and in one of the subsequent wells the thickness is 560 feet without a break. This compares with 35 to 40 feet for the upper oil zone at Leduc, although there is a gas cap in the east part of the field with a maximum thickness of more than 100 feet and a lower zone 35 feet thick. It would be surprising, therefore, in view of the thickness of the oil zone at Golden Spike, if the reserves are not of the order of a couple of hundred million barrels.

About 30 miles northeast of Edmonton the Redwater field, discovered in 1948, is the largest and most important field yet found in Canada. The original well had an oil zone 130 to 140 feet thick, and developments have now taken place throughout a width of 3 miles and a length of 12 miles north of North Saskatchewan River. To the south of the river only one well, Imperial Simmons, has been completed, 3 miles south of the most southerly producer north of the river. There is no doubt that the Simmons well is part of the Redwater field, as the oil-water line is level. It is unknown how far south of the Simmons well the Redwater field may extend, but the field is regarded as having a reserve of, perhaps, 600 million barrels, although this figure is not based on any Federal Government studies.

In addition to the Edmonton area there is a small field 18 miles northeast at Bon Accord, and another that looks very promising 12 miles north at Excelsior. This last field is quickly being extended as a well a half-mile south, and another one mile east of the discovery well has proven productive. The more easterly well has an oil zone 63 feet thick and on test yielded oil at the rate of about 1,200 barrels at day.

Another important Devonian discovery is that of Stettler, 45 miles east of Red Deer and approximately midway between Calgary and Edmonton. Two zones similar to those at Leduc have been found to be oil-bearing, with about 100 feet of productive oil zone. The size of this field is as yet not known, but, like the others, it is gradually being extended and now has three productive wells.

The discovery of these fields, following closely on one another after many years of desultory search with only small

success, has stimulated exploration to a high pitch of activity, with more than 100 geophysical parties engaged toward the end of last year. There is no doubt other fields will be found, but the area open for exploration is so large that a great many years must elapse before any adequate appraisal can be made.

PROSPECTS IN MESOZOIC STRATA

The Devonian discoveries have been so spectacular that the importance of the Mesozoic stratigraphy in relation to oil prospects is for the present not being adequately emphasized. The discovery of oil in the "Viking sand" at the base of the Upper Cretaceous in the Joseph Lake area, 18 miles southeast of Edmonton, is highly important, in view of the fact that this same sand contains approximately a trillion cubic feet of gas in the Viking-Kinsella area, 90 to 100 miles east of Edmonton. Sands at a similar stratigraphic horizon and probably of about the same age contain gas at Provost in east central Alberta, at Bow Island, Foremost, Pendant d'Oreille, Manyberries, and so on, in southern Alberta, and there seems to be a very considerable gas field indicated in wildcat wells drilled in the search for oil north of Edmonton. One of the large undeveloped gas fields in this horizon may occur in the Lac La Biche and Athabaska areas northeast of Edmonton.

It is perhaps in the Lower Cretaceous that the greatest prospects exist in Mesozoic strata. In southern Alberta all Lower Cretaceous strata are nonmarine. Northward and westward from the Edmonton area there are interfingers of marine strata into the nonmarine strata, and at Fort McMurray on the Athabaska River and in the western Peace River area there is a succession of marine Lower Cretaceous strata alternating with nonmarine strata. The marine strata, of course, represent deposits from former seas, and the shore lines of these can hardly be other than a favorable place in which to search for an oil field.

It seems hardly a coincidence that the heavy oil in the Lloydminster, Vermilion, and Wainwright areas of east central Alberta and the Lloydminster and Lone Rock areas of Saskatchewan are in Lower Cretaceous strata on the southern margin of the marine interfingers. At Fort McMurray there are the bituminous sands in Lower Cretaceous strata, and, although some geologists express the view that this oil may have been derived from the Devonian and be a residual product, other geologists including myself would just as vehemently argue, probably to no effect, that the oil is indigenous to the Lower Cretaceous and is much the same now as when formed. The volume is undisputed by all, namely, that 100 billion barrels would be a modest estimation, and many would place it at more than twice that amount.

As further evidence of the presence of oil in the Lower Cretaceous, small light oil fields have been developed on the east edge of the Woodbend field, 7 miles east at White-mud, at Volmer north of Edmonton and at various other places. These areas are, as yet, all small, but there would seem to be strong geological evidence to support the view that the prospects for large oil fields, particularly northwest of Edmonton in the general Peace River area, are excellent in Lower Cretaceous strata.

It is impossible here to discuss the prospects in Jurassic

and Triassic beds of western Alberta and northeastern British Columbia. Oil shows have been noted in drilling in marine Triassic beds of the Peace River area, which have a thickness in the western sections of as much as 3,000 feet. There may also be some prospects in the Jurassic which in the same area is 300 to 600 feet thick.

ECONOMIC ASPECTS OF OIL AND GAS PRODUCTION

Oil production in western Canada reached a point last summer where it was sufficient to meet all prairie requirements. A large expansion in refinery facilities is under way, but this does not expand the market except insofar as it keeps out refined products from other sources that formerly competed in the Prairie markets. As is well known, a pipe line from the Edmonton area to Gretna in Manitoba via Regina, Saskatchewan, is to be constructed next year. It is anticipated that oil from the pipe line will go in a spur line to Winnipeg but that the main pipe line outlet will be at Superior, Wis., at the head of Lake Superior. This will make crude oil available by tanker on the Great Lakes to Sarnia and other refineries in eastern Canada.

The market for oil and oil products varies considerably, according to the season on the Prairies but is now roughly 60,000 to 65,000 barrels a day. There is little doubt potential production at the present time is double this amount. There will thus be proration until the pipe line is completed, and even then the production developed by that time may exceed market outlets and will probably do so, particularly during the closed shipping season on the Great Lakes.

At the present time Canada uses about 300,000 barrels of oil a day, and the amount is rapidly expanding because of railroad, industrial, and domestic change-over from coal to oil. The oil that is imported at the present time into eastern Canada, that is, into the Maritime Provinces and Quebec, is almost exclusively from foreign sources other than United States, whereas practically all oil imported into British Columbia on the west coast is from California and for the first nine months of 1949 averaged about 19,500 barrels a day. It may be that this market could be captured by Alberta oil if a larger outlet than the needs of British Columbia alone could be supplied, but, in view of surplus oil available in United States, this does not look like too attractive a possibility just now.

The natural gas reserves of Alberta also are growing very fast. An appraisal at the end of November 1948 showed a total of 4.2 trillion cubic feet in various fields so far developed or partly developed. It has been stated that this has been increased by more than 3 trillion cubic feet in the last year, but this figure is based on wells that have been largely drilled in the search for oil, and hence the estimate is admittedly not based on such sound engineering data as in developed fields. It may, however, be accepted as an approximation, because, as is well-known, when markets have become available in other areas showing gas resources such as are being indicated in Alberta, the establishment of reserves has quickly followed the drilling of development wells in areas where gas has been found in individual wells. The problem that now faces the Alberta Government is whether export is to be allowed on the basis of present indicated reserves, and applications are presently under consid-

ration for pipe line outlets. To what extent the building of pipe lines for gas outlets will influence oil outlets remains to be seen, but the future for expansion of the gas industry in Canada may be just as important for our national welfare as is the expansion of our oil industry. (*Applause*)

* * *

Chairman Randell: I was sorry to get a phone call this morning and be notified that Congressman Keogh has been detained in Washington for terribly urgent legislative matters. I was, however, very, very happy that he managed to get someone who, I think, will be a very, very acceptable substitute.

Otis Ellis, a Tennessee lawyer, instead of a New York lawyer, has been the general counsel to the committee that Congressman Keogh is heading. I know he is extremely able. I have seen him in action. You will shortly. Mr. Ellis. (*Applause.*)

* * *

Mr. Otis H. Ellis: Congressman Keogh asked that I express his regrets that he was not personally able to attend. Fortunately, or unfortunately, the situation has developed in Washington now where it is just as important whether you vote, in addition to how you vote, with an election coming up.

I might also state that I am very happy to be here, but I am also anxious to get away. I will explain that in this way: We have a family physician who is very competent as a medical man, but he has had no training whatsoever in mathematics. For the past week I have been walking around with a bottle warmer in one hand and a checkbook in the other, and I may become a mother at any minute.

I will read Congressman Keogh's remarks to you, those he would have made, and you will see by the text that he did intend to be here, because it is written as chairman of the subcommittee.

(*Mr. Otis H. Ellis then read a paper prepared by the Honorable Eugene J. Keogh as follows:*)

* * *

The fourth quarter, 1949, issue of the ANALYSTS JOURNAL contained an article by Mr. John W. Spurdle which stated—and I quote: "The oil industry is one of our greatest industries and one of the most complex." I consider the word "complex" as being a gross understatement. Mr. Spurdle further states: "This latter fact is a matter of considerable pleasure to the security analyst." I can assure you that the same feeling is not enjoyed by the members of the oil imports subcommittee of the House Small Business Committee.

Our subcommittee, of which I am chairman, has for many months been engaged in investigations and hearings on the effect of oil imports on independent domestic producers. Every effort has been made to produce constructively an unbiased record that reflects the facts, as well as the feelings and opinions, of all segments of the domestic industry. It is hoped that, when these investigations are completed, we will be able to determine what, if anything, should be recommended to the Congress for the solution of this problem.

Fortunately, or unfortunately, the petroleum industry is as

fluid as the commodity in which it deals; hence the solution of today might be the disaster of tomorrow unless adequate flexibility is provided. For example, imports have increased appreciably since these hearings began and will undoubtedly change before our investigations are concluded.

It would be impossible in the time allotted me to discuss completely all the pros and cons of the material factors that must be considered before a determination is made as to whether legislative restrictions should be imposed on oil imports. I will, however, endeavor to point out the high lights that have been developed by our subcommittee.

I think the principal contentions of the independents, who advocate limitations on imports, are briefly these:

1. That the domestic producing industry should be permitted to supply domestic demands up to the point that such demands would not exceed the maximum efficient rate of production, and, from that point on, imports would be permissible.

2. That the fluctuations of demand should be cushioned by imports rather than by domestic production.

3. That, relatively speaking, the domestic producer can no longer look to world markets as an outlet and must rely on domestic markets for the sale of his production.

4. That the surplus oil of the Middle East and South America is now invading their one remaining market, and, of more serious consequence, new production in Canada and Mexico threatens even deeper inroads in the future.

5. That production in the United States has been cut back upwards of 800,000 barrels per day, a substantial portion of which is attributable to supplanting imports.

6. That these cutbacks result in lower income to the producer and, consequently, less capital with which he may explore for, find, and develop new reserves of oil.

7. That exploratory drilling is already dropping and will continue to drop.

8. That, if this situation continues, it will ultimately result in a lowering of this Nation's oil reserves and productive capacity, thereby impairing the domestic economy as well as our national security.

9. That, if the domestic industry permits its productive capacity to be lowered to a point where it is not self-sufficient for normal peacetime needs, we will become dependent on imported oil and thereby be subjected to monopolistic practices, since ownership of foreign oil is in the hands of a few companies.

The principal contentions of the importers, who oppose restrictions on imports, are briefly these:

1. That a portion of current oil imports is supplanting domestic production, but the extent of supplanting is not causing adverse effects.

2. That the "supplement-supplant" principle should be viewed on a long-term and not a short-term basis.

3. That in the winter of 1947 and 1948, when the Nation was facing an oil shortage and every indication pointed to increased consumer demands in the United States, long-range commitments and plans were made which would insure adequate oil from off-shore reserves to supplement domestic production.

4. That these commitments are still binding, and the flow of oil thus started cannot be turned on and off to meet domestic fluctuations.

5. That there is a level at which imports would adversely affect the domestic industry, but that level has not been reached. (They are supported in this position by spokesmen from the Department of Interior and the Department of State.)

6. That they, too, are producers in the United States, and it would be unreasonable for them to import in quantities that would prejudice their own domestic interests.

7. That they have heretofore found outlets for the major portion of their foreign production in foreign markets, but these markets are now being jeopardized by British monetary and import regulations.

8. That it may become necessary, in order to maintain their concessions, to increase imports unless relief is obtained from the situation created by the British.

9. That they have been supported in their development of foreign concessions by governmental indorsement, and it would, therefore, be a repudiation for the same Government to impose on them regulations revoking that support.

Despite these conflicting positions, the industry, through the medium of the National Petroleum Council, agreed to the general principle that imports should be permitted for the purpose of supplementing but not supplanting domestic production. With the adoption of this general principle, agreement ended, and the independent faction of the producing segment of the industry drew swords with the importers over the definition and implementation of this policy. These differences became so heated that Secretary of Interior Krug requested the council to investigate the import problem and to submit recommendations as to how the problem should or could be met. The council adopted a report, on January 26 of this year, which contained the following conclusions:

1. The sharp increase in imports of crude oil and its products, coupled with the continuing decline of exports of crude oil and its products, has hurt some segments of the domestic oil industry.

2. If imports continue to increase without regard to the principle of supplementing the domestic production of crude and products, they will seriously damage the oil industry and thus adversely affect the National economy and the National security.

It is significant to note that the council made no recommendations, and I seriously doubt if agreement on such recommendations could ever be reached by the Council.

Subsequent to the latter agreement, the independent organizations renewed their fight, claiming that the importers who subscribed to the agreement were not living up to the agreement. At first blush, it would appear that the industry, having agreed on these findings and principles, would have no difficulty in implementing the mechanics necessary to put them into effect. Such, however, is not the case.

In addition to the objections raised by the independents and importers, the State Department and other governmental agencies, in the course of our investigations, have directed our attention to the fact that this Nation is promoting the doctrine of reciprocal trade and is advocating that certain designated countries ship more of their products to the United States to improve their dollar position. Our attention has been further called to the fact that we have reciprocal trade agreements, the provisions of which

would possibly be abrogated by import restrictions.

Military authorities say that our needs for oil in time of war would require all domestic resources, as well as aid from the Western Hemisphere and any other place from which oil could be obtained, and that curtailment of imports might dry up these foreign sources.

These are but a few of the factors to be considered, and it is easy to see that a proper determination cannot be made by mathematical formula alone. We cannot, on the basis of barrels, determine when imports are affecting the domestic industry. For example, the domestic industry might possibly operate at reasonably healthy levels without any import restrictions, if the current price of crude oil remained the same. On the other hand, if the price of crude oil dropped substantially, the domestic industry would undoubtedly be retarded in its exploration efforts, even if imports remained the same.

If we should determine that imports are adversely affecting the domestic industry and that restrictions should be imposed, how can we do so in the face of our current trade policy? On the other hand, we cannot permit imports of any commodity to reach levels which would impair our domestic economy or adversely affect our national security.

I could possibly speak for hours on the relative merits of the contentions and factors pointed out. Since we have not completed our investigations, I do not wish to bind myself to opinions which could be changed by later developments and, therefore, conclude by stating we are still seeking the answer. You may be assured that such answer will not consider alone the position of either the importer or the domestic producer, but will also give consideration to the whole industry, the domestic economy, and our national security. I do not subscribe to a policy that would give aid to any industry, or any segment of an industry, if by so doing the common welfare is jeopardized.

* * *

Chairman Randell: A good many of my friends accuse me of masquerading as an oil analyst. They claim I don't have enough gray hairs to be a very good one. But this afternoon I think you have been introduced to some of the tremendously weighty problems that do face the industry, and reprints will be made available of this session, I am sure, that will bear close scrutiny.

Question: I should like to ask Mr. Herold what his personal guess is about the price structure of the oil industry.

Mr. Herold: That is a very good question, but one I am afraid I don't have any answer to. I just don't know. Someone else here put it very well—holding a stopwatch on what the price of crude is going to do. I am sorry; I just don't know and just don't have any good thoughts on it.

Question: Mr. Falck was quoting relative prices between natural gas and no. 6 fuel oil. That would be strictly on a Btu basis, or did they take into account efficiency?

Mr. Falck: A straight Btu basis.

Chairman Randell: And as you go a little bit further on that, had they been reduced to an efficiency use basis, the discrepancy would have been even greater.

Question: I should like to ask Dr. Hume what the status is of the various pipe line projects to bring gas down into the United States.

Dr. Hume: That is in the hands of the Alberta Government, and no decision has been made.

Question: Dr. Hume, out of the reserves of gas that you mentioned for western Canada, what percentage would you say are now developed?

Dr. Hume: The 4.2 which I mentioned is fairly well established, 4.2 trillion. The 3 trillion which has been added this last year has been on the basis of wells drilled for oil and has not the same degree of engineering data back of it.

Now, a lot of wells have been drilled that have gas in them, but they are being correlated on a basis that may or may not prove sound. I mean they are some distance apart, and it will need quite a lot of development wells before we can be sure that that 3 trillion is as sound as the 4.2 trillion, which is the development basis.

Question: Have your ideas changed on Pincher Creek?

Dr. Hume: We have not made any appraisal of the Pincher Creek area. We are doing that at the present time. We are on that. We have one of our engineers going to western Canada collecting the data now, and we will be issuing a new Dominion Government report on the gas reserves.

Question: I understand that the same formula was used for the additional 3 trillion cubic feet that you used in your original estimate.

Dr. Hume: That is so, up to a certain point. The same formula has been used, but the wells are wider spaced, and the correlation is being made between them on a geological basis.

Now, up to a point, it is, I think, a very reasonable estimate, and I would agree with that 3 trillion cubic feet, and I don't think the same engineering data are back of that as in some of the other estimates. Does that answer your question?

Question: Mr. Falck, you mentioned that in your opinion you thought the oil companies received a substantial amount of their net income from natural gas operations.

Number one, would you define what you think is "substantial," and, number two, would you be willing to cite the names of a few companies where you think that they may be substantial?

Mr. Falck: No, I would not be willing to name the companies.

Question: How about the first question?

Mr. Falck: Well, it may be that the contribution to gross revenues might be only 15 or 20%, but the contribution to the net might be 35 or 40% where you had joint operations and a common overhead. It would take a good deal of analysis to determine the precise contribution of the natural gas, let us say, to Phillips Petroleum. In my opinion, it would be substantial. Not being a security analyst, I don't see how I can give you a percentage as being equivalent to the term "substantial."

Question: Would the passage of the Carr-Thomas Bill encourage segregation of gas reserves by the oil companies?

Mr. Falck: Well, on the contrary the proponents of the bill take the position, I believe, that the passage of the bill would make such segregation unnecessary.

Question: I have one more question, Mr. Falck. I wonder if you would care to comment at all on the investigation

of March 20 in Battlesville of the Phillips Petroleum Company by the commission.

Chairman Randall: The question was whether Mr. Falck would care to comment on the current investigation of the Phillips Petroleum Company to determine whether or not they are, in effect, a natural gas company. I think I have restated it, but I think it is an accurate restatement.

Mr. Falck: I would like the questioner to describe the kind of comment he would like me to make.

Question: Do you think that the commission actually wants to prove that it is a natural gas company and reduce the rates as requested by the City of Detroit and other municipalities?

Mr. Falck: Well, I am what is called a "C" lawyer in Washington. I have never been admitted to the bar. I have been accused of practicing law without a license. We have a Tennessee lawyer next to me.

However, authoritative lawyers, or at least lawyers who are well paid, tell me that under the various decisions of the Supreme Court in the leading cases, the interstate case, and even in the recent East Ohio case, under the Natural Gas Act, the Federal Power Commission could legally assert jurisdiction over the flow of gas from the bottom of the well to the burner tip if it is interstate, over any portion of that movement, or over the entire movement.

Under those circumstances, and under those decisions, it seems to me obvious that Phillips Petroleum must be a natural gas company, as defined in the act. Whether the commission will exercise all of the jurisdiction that it has is a discretionary matter, and I would assume that, even if the act is unchanged, the commission would stop, as a matter of prudence, some place short of exercising the totality of the jurisdiction which the act apparently gives it.

Chairman Randall: I want to make one thing clear here. You are aware that these gentlemen are, with the exception of Mr. Herold, all in some way tied in with the Government, either ours or the Canadian Government.

The topics that we have asked them to discuss have been very, very complicated and touchy problems. Naturally, they cannot make a decision one way or the other. All they can do, and all I asked them to do was to sit down, if possible, and outline the various pros and cons. We assume that the security analysts themselves are clever enough to get the real answer once the problem is laid clearly before them.

Question: Mr. Falck, in view of the condition that the fuel oil and natural gas commodities are in—in the consuming market today, I mean, the price structure—you alluded to the possibility that there might be a change in the way of regulating the interstate transmission companies from an original cost to some economic value formula. I should like to ask you what the prospects are for that kind of a change, and whether it would require an amendment to the Natural Gas Act, or a new law to set that machinery in motion.

Mr. Falck: Well, this is just one man's opinion. I don't think that any amendment is needed to the Natural Gas Act. The section dealing with rates in the Natural Gas Act, as enacted by Congress in 1938, and amended in 1942, merely says that the commission shall determine rates that shall be "just and reasonable." That gives the five commis-

sioners, or at least three out of the five, a wide open opportunity to take into consideration all relevant facts, including value of service, as well as cost of service.

Now, as you know, in Michigan, recently, that commission, which has long been known as a progressive and a tough commission, so far as utility regulations were concerned, gave some real recognition to value of service in the Consumers' Power case. It is inconceivable to me that the Federal Power Commission can long continue to ignore the tremendous change in price levels, postwar as against prewar, or can continue to impose on the early pipe lines, Cities

Service, Panhandle Eastern, United, a formula that gives them 2 or 3 cents for their gas, where independent producers, or new producers, are getting 10, 11, or 12 cents in the same field, and sometimes out of the same well—I don't think that the commission needs to have an order from Congress in order to take those plain and obvious facts into account in a rate case.

Chairman Randell: Ladies and gentlemen, Lucien Hooper has been generous in letting us select our own panel of speakers, and I think we had better go along with him on clearing the room at the time he requested.

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Dinner Forum

THURSDAY EVENING, MARCH 2, 1950

JOSEPH M. GALANIS President of the New York Society of Security Analysts, presiding.

Chairman Galanis: On behalf of the New York Society, which, again, has the honor of acting as host for the Annual Convention of the NFFA, I want to welcome you, especially those of you who came from out of town, and the longer the distance, the heartier the welcome.

We have about six people who came 3,000 miles from San Francisco and have expended much effort to get here. I hope that, if the convention is ever held in San Francisco, we will at least be able to double that number from New York.

Now, Bill White very aptly said this noon that this convention has put us in the big league. We must endeavor to stay there and to improve each year.

Before introducing the two main speakers for the evening, we would like to pause for a while and let each one of the gentlemen at the head table take a bow. (*Introduction of guests at head table*)

I want to introduce the newly elected President of this Federation. He is an excellent analyst. He graduated from Northeastern University up in Boston a long time ago—well, not too long ago at that—where he specialized in economics, as did a great many analysts. Mr. Hansen has spent over fifteen years doing industrial analytical work and is a fine person, and I think he is highly qualified to lead us onward in the coming year—George Hansen of Keystone. (*The audience rose and applauded.*)

President Hansen: Well, there is nothing like learning a little something about yourself. There is one thing I like particularly about this little job that I have tonight. It is a very little one. The precedent has been established in The National Federation that its outgoing President has the dirty work, so I am not going to take much of your time. We are on a very tight schedule, but these are a few things that I would like to say.

This is the third annual meeting of The National Federation. It had its beginnings on a very warm June day in 1947, and I am proud to say that some of us from Boston contributed to its beginnings. As Mr. Galanis has said, my good friend and colleague, Mr. Woodworth, is the George Washington of our Federation.

We started out with the societies in the cities of New York, Boston, Chicago, and Philadelphia. In the intervening years, we have added Los Angeles, San Francisco, and Detroit. As of today, through the efforts of Mr. Hooper, who will give you a report on his stewardship shortly, we have added Montreal and St. Louis. We are growing. I am looking upon a very much larger crowd today than it was possible for my predecessor a year ago or so to do. I am sure that with the help and experience of those who have gone before me, we are going to have more progress this year. Thank you. (*Applause*)

Chairman Galanis: George, the best of luck to you.

The next gentleman I have the honor to present has spent some eight years being of great help to the New York Society. He has been untiring. He has been a vigorous worker for the profession itself and left a fine record for all to follow.

The New York Society has always given him the most burdensome assignments, and he has taken them willingly. He has carried right through and we have benefited. He was appointed program chairman, which always is a trying task. He was made President of the Society. We elected him as President of the Federation a year ago, and he has done a magnificent job, as this gathering will attest.

He is going to talk to us about the progress of the profession. Without further ado, I want to present that rare combination of Polonius and Calvin Coolidge—Lucien Hooper. (*The audience rose and applauded.*)

* * *

Mr. Lucien O. Hooper: In the first place, I want to thank some of the people who have made possible this glorious day here today. First, there is Jerry Jenks. Jerry Jenks arranged this program; he attended to all the details, and Jerry Jenks is entitled to the thanks of the entire profession here tonight because he did such a glorious job. (*Applause*)

Now, I suppose the other very important—in fact, absolutely essential—person to this gathering here tonight is Helen Slade. (*Applause*) You know, Helen has made all of these arrangements. She obtained these beautiful quarters for us, and I am sure you are wonderfully satisfied with them, aren't you? (*Applause*)

She arranged all the seating. She attended to all of the tickets, made all your reservations, and, do you know, I must say something about Helen. She wasn't cross once during all of this, and that is simply wonderful. I am sure that, if any one of us had put up with the annoyances that Helen has put up with these last two weeks—she sat up until two o'clock in the morning signing tickets and all that—we would have gotten out of patience many times. Helen's patience was never even in danger at any time during this period. She is a wonderful woman; she really is, and she is the mother confessor of all analysts not only here in New York, but also throughout the United States. (*Applause*)

Helen, I wish you would come up here and get these flowers. Do you know that there is really nothing too good to do for Helen? She is just simply wonderful.

I want to thank Mrs. Morrison Parker and the Republican County Committee for having the seating lists printed.

Now Pierre Bretey, who is editor of the JOURNAL, in addition to being the secretary-treasurer of the National Federation, is going to prepare a complete verbatim account of the entire convention for publication in the second quarter issue of the JOURNAL, which will be obtainable some time during the next few weeks. Pierre is doing quite a

lot of work in connection with that, and I hope you will appreciate it. (*Applause*)

I want to thank, too, the many people who came from out of town. I understand that approximately one third of all the people here today are from out of town.

And I want to thank the speakers. We had a wonderful aggregation of speakers here today, and many of them came long distances in order to be with us. I shall acknowledge their services in writing at a later date.

And, lest I forget, there are many unsung heroes here, and will you please give all of those people I have neglected here tonight a hand. (*Applause*)

You know the editor of the United Press received a copy of the manuscript of this address, and he found that it began with this sentence: "My remarks will be brief." Then it went on for 17 pages. He thought that that was worth recording in his United Press dispatch today.

I am allergic to two things, manuscripts and microphones, and I have both here tonight. So what happens to this manuscript will be nobody's business, and if Elma has quoted something from it that I don't say, please all forget that I had a manuscript and say that I said the things quoted, because I am rather weak on manuscripts.

My remarks will be brief. After listening to 45 or more speakers today, you are in no mood to endure a series of long after-dinner talks. In planning tonight's session, the committee thought the program should be made much more limited and more digestible than the hearty and varied fare offered during the daytime forum hours. If you analysts are not mentally and physically fatigued, you have not taken full advantage of the intellectual menu offered during the day.

First, I shall report briefly about the activities of the National Federation of Financial Analysts Societies, which I have had the great honor to lead during the past year. Then, I shall talk more generally about the progress of this new profession, its problems and its future. In this second part of my remarks, I hope, I will get away from matters of formal society organizations and discuss more personal matters which should be of interest to the individual security analyst.

This is an exceedingly personal profession, and sometimes our societies are so concerned about the subject matter with which they deal, the things they touch and handle, that they forget about the individual.

For the benefit of the many guests we so cordially welcome here tonight, the National Federation of Financial Analysts Societies is not a society itself, but a federation of sister societies operating in the cities of Boston, New York, Philadelphia, Montreal, Chicago, Detroit, St. Louis, Los Angeles, and San Francisco.

All these societies have something in common, in that all the members of all of them are interested in one way or another in the analysis of investment. But they are all different in age, size, policy, procedure, and emphasis.

New York has around 1,400 members, and at least four of the other societies have less than 50 members. The San Francisco Society, which is the oldest, was organized in 1929. St. Louis and Montreal, which were admitted into membership at the annual meeting today, were organized during the past twelve months. Some of the sister organi-

zations are interested chiefly in institutional investment problems, and others largely in the problems of investing funds for individuals.

New York is concerned with every phase of investment science, because it numbers among its membership analysts of every type, analysts working for every purpose. Its membership is predominantly of investment house origin. Because of the size and the diverse character of the membership, the New York Society of Security Analysts has the most varied and most extensive program. New York usually holds three to five forum meetings each week.

On the other hand, some of the other organizations are in position to do less diversified but sometimes more intensive work and are able to put on specific progress that have a more universal appeal to their members than anything New York can do. Boston, for instance, has a most excellent educational program. Chicago's high-quality membership, drawn largely, but not exclusively, from institutional analysts of senior standing, naturally promotes a very high-quality program. Philadelphia and Detroit are much more like Chicago than is the New York Society. The San Francisco Society is not only old but also very strong in every way, but more like New York than any other in the type of membership. Montreal and St. Louis are still in the early stages of development.

Joint projects are handled by the National Federation, which acts as a liaison organization. These projects include the Annual Conventions, such as the one held today; the *Annual Directory of memberships* which is a most useful tool for active analysts; and exchange of information and ideas. The *ANALYSTS JOURNAL*, a quarterly magazine, is published by the New York Society but is available at cost to the membership of other societies on a club rate subscription basis. The management of the *ANALYSTS JOURNAL* is appointed by the New York Society, but every effort is made to give the sister societies an important and ever-growing participation in the formulation of *ANALYSTS JOURNAL* policies and to encourage members of sister societies to contribute articles.

I served as a very active vice-president of the National Federation for two years, and I have been President for the past year. Before that, I served as forum chairman of the New York Society for one year, as President of that Society for one year, and as a member of the executive committee for eight years. During that period, since 1942, the analysts have evolved from a loose and unorganized mass into a fairly closely knit profession with a nation-wide chain of active associations. I think I know something about the problems we have faced and the problems we still face.

On the good side, we have many competent and talented members who are willing and anxious to give their valuable services unselfishly to the welfare of their fellows. We do not lack for leadership, and it always has been good leadership. These societies always have grown in numbers, in membership, and in influence. Their programs constantly have improved. Interest is consistent and does not wax and wane. No personalities dominate, except for short periods. It has been a common policy to insist on rotation in office and rotation of responsibility.

Our worst shortcoming, as I see it, is leaning too much

a outside talent in our programs. Often one of our own members has much more to contribute to the art of security analysis than any big name corporation executive.

For a profession made up necessarily of opinionated individualists, both as a group and individually we are too modest for our own good. Every analyst in this room knows that some of our most profitable meetings are addressed by our own members. If this convention today has been an especially interesting one, it is largely because the committee insisted on talent from within rather than without the profession.

Sometimes projects, like the ANALYSTS JOURNAL and our conventions, may at times limp a bit because of non-professional management. It seems to me that we gain more than we lose from amateurish efforts, and I'm glad we do not have the funds to hire people to do more finished jobs.

The average analyst is a cold-blooded person. He does not wear his heart on his sleeve, and usually he is suspicious of everything—including himself.

The fact that more than 2,000 analysts, practicing in nine principal financial centers, have found these societies increasingly worth while shows conclusively that they have been doing something for the profession, and for the investors the profession serves. I am sure that all these societies are going on to do better and bigger things, that similar associations will be formed in other cities, and that the membership of existing clubs will continue to grow. In this work of expansion, I am certain that this relatively new National Federation will have an increasing part.

* * *

Leaving the matter of professional organization, I would like now to make some observations about the profession itself. I hope you will not think I am presumptuous. I have been an analyst continuously since the beginning of 1919. I have seen the profession develop from swaddling clothes into real adulthood. Furthermore, during the past eight years I have been as active, perhaps, as anyone in its organization. I am personally and intimately acquainted with hundreds of fellow students of investment values. I think I know something about what they are doing, how they are doing it, and how all of us can do a better job—for ourselves, for the investment community, and for our employers. And taking a leaf from my own notebook, I am not going to hide my light under a bushell!

As I see it, this profession needs to do four things:

1. It needs to acquire a better appreciation of its own importance and mission.
2. It needs to be more assertive in presenting its findings and opinions.
3. It needs to stifle jealousy and encourage co-operation, not only among its own members, but also throughout the financial community.
4. It needs to put every increasing emphasis on the necessity for a broad cultural and social background for its membership.

The time is too short to develop each one of these points thoroughly, and all I hope to do is to make you think about these things—to lead you to put the clothes on my outline.

Recently the staff of the ANALYSTS JOURNAL had a con-

ference with the publication's advertising agents, the people who sell the advertising that adds to the revenues of the profession's official publication, making possible a better magazine. One of the first things the editors were told was this: "This profession just does not know how good it is, or how important it is."

With that, I am in complete and emphatic agreement. I am a general practitioner and have little chance to specialize in anything; but I have found by experience that there always is some analyst somewhere who knows the answer to every specific question I want answered. All I need to do is to be smart enough to find the right analyst; and, if my acquaintance is broad enough—and I help the other fellow enough—the chances are that it won't be very long before I locate the man I need and the information I require.

Why do you think that the top executives of over 500 corporations have taken the time and trouble to address our New York noon forums during the past nine years? Why do you think some of them have come back two, three, and four times for repeat engagements? Because these top corporation executives realize the vast influence you wield in the investment community.

Why do you think investment houses constantly expand their research organizations? Why do they spend the money? Why do you think the chief analyst more often than not becomes a partner of his firm? Because the investor himself more and more is seeking the advice of the analyst and acting on it.

This profession has ceased to be an aggregation of meek, underpaid clerks, hardly more than third-rate librarians. Its tools are now much more than a few skeletonized annuals and say-as-little-as-you-can annual reports. In less than a generation we have become a respected profession of expert technicians. We occupy the same position as advisers about investments that the physician does as an adviser in matters of health.

We must respect ourselves accordingly and see to it that other people appreciate the importance of our place in their lives. In this way we can hasten the realization of the professional objectives to which these societies are committed.

As analysts, we should regard ourselves as responsible professional advisers to the publications, clients, security dealers, commission brokers, banks, and institutions who employ us and seek our counsel. This sacred responsibility must not be carried lightly. We have an obligation to tell the truth as we see it; and this truth must not be diluted or adulterated for the unworthy purpose of pleasing people and thus currying temporary favor or passing financial advantage. That is nothing short of unethical procedure, and unethical practice of any profession brings disaster rather than advancement.

The most common outside criticism we all hear was summed up by an epigram I heard recently. It was said that, if you lay ten analysts end to end, you will find that they point in every direction.

That criticism, if taken literally, does not worry me too much. It shows healthy individualism. But I am sure that what the fellow who wrote that meant was that, if you should lay one analyst end to end, that one analyst would point in every direction.

In our art—it is not a science—it is easy to qualify and tone down every opinion and recommendation to a point where it is not opinion and no recommendation at all. I am sure that the people whom we serve and the people for whom we work, will respect us more and find us more useful if we express our convictions when we have them, and express them vigorously giving qualifications no more weight than we think they deserve.

Let's put the emphasis on the assertive opinions and give the qualifications the shading. Too many of us put the emphasis on the qualifications and shade the opinions so obscurely that the reader or listener cannot find them.

An analyst, the profession always should remember, is more than a mere researchist. He is expected to be an expert. He is expected to have judgment. He is expected to have opinions.

Your physician would not be worth his salt if he ended his efforts with the diagnosis. You want him to tell you what to do about it. Sometimes, and in fact very often, he is no more positive of the proper procedure than you are after you have diagnosed a situation or a security. But you expect him to make a recommendation according to his best judgment, shading the qualifications and stressing the opinion. If he stressed his doubts and made a weak, watered-down prescription for curing your malady, you would lose confidence in him. The analogy is perfect.

Professional jealousy must be avoided. Free exchange of ideas and information must be fostered. The field of investment analysis is as broad as all human knowledge, and no man in this profession can expect to rise to distinction and deserved esteem except through mutual co-operation with his fellows. All of us want to remain individualists, fully exploiting our talents and our personalities; but none of us can do our best unless we seek the counsel of our fellow analysts and make our own contributions to the common cause of investment intelligence.

It is an excellent idea to quote the other fellow by name and mention his accomplishments and ability in a complimentary vein. If he is a competitor, say so; but remark that he is real competition. It is much better to give credit than to accept credit for the other fellow's ideas. Perhaps he won't reciprocate, but that does not excuse you. You are a gentleman, and you should act like one.

In some cities, I suspect that jealousies between analysts and jealousies between firms actually are holding back the growth of our societies. This is not only unfair but also childish and tends to defeat the aims of the profession. In other cities, I suspect that some of our societies, either consciously or unconsciously, try to confine their memberships to certain types of analysts—thus tending to make our units exclusive clubs rather than inclusive professional organizations. That is a mistake. Every competent analyst must be encouraged and urged to join a professional society—whether you like him or not . . . Sometimes you may need him. In fact, sometimes you are sure to need his help.

Let's be done with all kinds of jealousies and avoid all kinds of cliques in developing this profession to the standing it deserves. Provincialism reflects on the people who are provincial, not on the people who are ruled out.

I like to talk about the profession of the security analyst.

It is something new under the sun. No one ever tried to devote himself exclusively to it or to make it a means of livelihood until about fifty years ago. The early analysts really were not much more than custodians of security manuals. Then they got to playing with figures, and everyone called them statisticians. Gradually it came to be realized that figures were only a very small part of the game. A good background in economics seemed desirable; and some of us, without the benefit of a degree of doctor of philosophy, were called economists. As time went on, however, it became recognized that a specialist in the judgment of securities was more than a librarian, more than a statistician, and more than an economist; and such specialists became known as analysts.

There are divinity schools, law schools, colleges of business administration, schools of accounting, colleges that turn out excellent librarians, and schools that manufacture teachers on an assembly line basis. So far as I know, on the other hand, there is not anywhere in the world a school devoted exclusively to preparing young men to become security analysts.

If there were such a school, of what would the curricula consist? I suppose you would suggest intensive courses in economics, courses in economic history, in accounting, in the anatomy of a corporation, in corporate reorganizations, in the operations of the securities markets, in the work of the investment banker, in the theory of interest rates, in trade cycles, in labor problems, and in similar related subjects. A man could master all those things though and still fall short of the profession's exacting requirements.

A good security analyst has to have the insatiable intellectual appetite of a Franklin, the enthusiasm and vigor of a Theodore Roosevelt, the rugged honesty of a Cleveland, the pioneering spirit of a Wright, and the simplicity of mind of a Lincoln. He also should have a cast iron constitution to give him the health necessary to work unbelievably long hours. It is necessary not only to develop the art of gathering information from people, but also to acquire the ever more difficult knack of imparting knowledge and opinions affectively. Some of the analysts who do the best job gathering information and formulating opinions, I have found, often fail utterly in the task of putting their accomplishments to profitable use.

It is literally true that every scrap of information and knowledge one gains in any field, even in the field of personal relations, at some time or another is useful for the general practitioner in security analysis. Over the past thirty-one years I have been forced many times to obtain quickly a working knowledge of the essential factors influencing hundreds of different kinds of business.

At times I have employed knowledge obtained on fishing trips and at funerals, gathered at cocktail parties, snatched from sermons, picked up from novels, gleaned from classical literature, acquired from the rough and tumble of local politics, remembered from a high school laboratory, and painfully learned in spending my own money. This is a profession where everything is grist that comes to your mill, and one where a retentive memory and constant thoughtful observation pays off.

What I am trying to say is that the investment analyst

is expected to know more than it is possible for any human being to learn. His profession is a grueling one because he has to cover so much territory and keep so wide awake—sometimes when he feels like sleeping. He can't separate himself from his work when he goes home at night. The brief case has to go too—and it has to be opened and cleaned up before morning. His field is the world's knowledge, and he must keep up with everything.

But in all of this, he cannot for one moment neglect the human factor. Every corporation has a management, and that management gives it a personality. The analyst, therefore, must know people and develop an ability to judge them. I know dozens of situations that look inviting in every way but one; they simply lack that indispensable human factor. I know some other situations, too, that would be worthless from an investment standpoint but for that splendid human factor that has been added. It is just as much our job to judge men as it is our function to know ore in a mine or potentialities in some new product.

And then there is the securities market itself. It is much more than interest rates, books and depressions, earnings and dividends, the national income and the complexion of the governments at Washington and in Moscow. Those are not the things that make the ticker chatter prices up or pull them down. It is something much more alive and human.

The market's gyrations, and the fluctuations in individual issues are determined by the impact of a constantly changing panorama of interacting and conflicting influences so complicated and all-inclusive that no mind can be conscious of all of them, or resolve their full significance.

Those who buy and sell stocks are those who really establish prices. They are influenced to act by reason, but also by fears and hopes originating in every sphere of political, social, economic, financial, business, and personal experience. Fears and hopes are emotions, and emotions are not always logical. The area in which the market commentator moves, therefore, often must be as much dominated by the psychology of the hour as by the economics of the generation.

I would not trade this profession of mine for any profession in the world. It is stimulating and fascinating. It supplies me with a box seat at all of the world's great dramas and tells me I must keep awake every minute lest I lose something—lest I fail to absorb something that will help me to help others to safeguard their savings, or miss ideas that may enable my clients to profit. (*Applause*)

* * *

Chairman Galanis: Well, it's better than driving a truck for a living, isn't it?

I am going to walk into the office tomorrow and ask for a good substantial raise, if my courage holds up.

The next speaker on the program is a gentleman who has had extensive experience in business and finance. He is also firmly convinced that the Securities Act can be administered firmly and fairly with benefits to all concerned.

It is a great privilege for me to introduce Harry McDonald, Commissioner of the SEC. (*The audience rose and applauded.*)

* * *

The Honorable Harry A. McDonald: Thank you, Chairman Joe. President Hooper, folks of the Society: I am very happy to be here tonight. I am afraid of you because—well, frankly, you are too smart for me. I have read you for a long time. I made money on some of you; some of you did me wrong.

I am very, very much interested in the market. I come from Washington. I am a bureaucrat, so-called, but I am still interested in the market. I am heavily interested in the market, financially, personally, and I am looking for a fellow to tell me what to do.

I have a place where I get my massages very frequently down in Washington, and down there most people who don't know think that those of us on the commission do know what the market is going to do. I love to sleep when I get a massage, but this guy talks to me about when Packard is going to go back to 13. If any of you folks can help me out, I would appreciate it.

You know, facetiously, analysts—and I respect you; I don't say this in any way disparagingly of your great profession—remind me (and I just thought of it tonight) of that great old show that ran for so many, many weeks and years on Broadway called "Three Men on a Horse." You remember that principal when he bet the races on the way down in the bus every morning; he put them down, but he never put any money up. He could always win, but, when he put the dough up, it was different.

I am not indicting you for having bad judgment. Don't think I am. I do think that we are all engaged in a profession that is difficult to measure accurately.

When I read Joe Livingston, get the paper and look at the market, and then I think of what I have heard at the table at the commission all week, then I am strictly confused. I don't know what to do.

I was particularly pleased tonight to hear that people had come from all over the country to attend this conference, 3,000 miles away from Frisco and the like, and I was reminded of my associate and fellow commissioner, Dick McEntire. Some of you who have been down in Washington, if you know the commission, know that we have five men on the commission. All of us are smart, of course, but this Dick is particularly smart. He comes from Kansas. He possesses that good old Western philosophy that is really wholesome; and he has a lot of humor; and he has a lot of sparkle. When I heard that some people were here from the Coast, I couldn't help but think that we, as a commission, have to do with the securities business all over this great and big country of ours, and Dick always tells a story that I think really points this out very well.

When we get to talking about what is good for one part of the country, or what is good for this, that, and the other, he says, "You know, that we are looking after the securities business all over this great country, and I am always reminded of that story of the great Chief Justice . . ." (For my purposes at the present time, I will leave him unnamed.)

He was a great jurist, and he had a great Supreme Court of the United States. They had fallen into a sort of negligent habit each afternoon, when they were discussing their opinions and trying to write their opinions, of having a couple of bottles on the table, and they would imbibe. It

got to a point where the opinions were being neglected in favor of other things. It was all right, but they recognized that they weren't getting the work out, so one of the justices said to the great Chief Justice: "Mr. Chief Justice, I think we should do something about this."

The Chief Justice said, in his wisdom, "I recognize we are spending too much time on other matters, perhaps frivolous. Let us restrict our imbibing to rainy days."

They all agreed. It was dandy for a while, because it rained every day. They were having a lot of fun, and everything was going good.

As it does in Washington, it turned hot, and the sun was shining every day, and they weren't getting very far. They found themselves getting into each other's hair; they weren't agreeing; there were dissents, and all that sort of thing.

The Chief Justice, on this particularly sunshiny afternoon, was irked no end. He looked out of the window on the side and said, "Mr. Justice, will you look out that window and see if it isn't about to rain, if there isn't a cloud in the sky?"

The Justice looked and he said, "Mr. Chief Justice, I assure you there is not a cloud in the sky; there is beautiful sunshine out there."

The Chief Justice said, "Please, look on the left. Isn't there a cloud in the sky somewhere?"

The Justice came back and said, "Mr. Chief Justice, I am sorry, but, so far as I can see, there isn't a cloud in the sky."

Whereupon the Chief Justice called upon all his great faculties and he said, "My fellow Justices, it isn't conceivable that in this great court, having jurisdiction over these great and expansive United States—it isn't conceivable that somewhere within the jurisdiction of this great court it isn't raining. Let's have a drink."

Now, I came down from Washington, and I have been engaged all my life in competitive business, and I don't come to you tonight with the answers. I didn't come here to tell you anything that you don't already know. I know what some people think of Washington. I know what some people think of politics.

I had one man say to me tonight, "So you're the Republican that had the nerve to take the job." I said, "Now wait a minute." I was reminded of that story of Bruce Barton, when he was a Congressman from New York, and he was out making a lot of speeches, like we all do, you know. He had quite a talk that particular evening. They lined up to tell him what a nice talk he made.

A little old lady waited patiently until she got to the Congressman. Barton had been introduced as a member of the Committee on Indian Affairs. She got to him and said, "Congressman, I wouldn't have gone home without shaking hands with you and telling you how much I appreciate meeting you. It was so fine," she said, "and you did such a nice job. I had always wanted to meet a Congressman who had had an affair with an Indian."

Now, if you want to see a Republican who took on a tough job, just take a look at me. I will give you a couple of minutes.

I think our President is most tolerant, and, may I say

this, without quoting him exactly: I think he is conversant with the problems that you and I have. I think he is very sympathetic to the problems that beset the investment fraternity. I am corrected sometimes and am supposed to call it "industry." I don't know, but, at any rate, I was in it, and I salute you, you people of the industry who are trying to do a job, and I know that the President of the United States joins with me—and I am not saying this officially, but I know he appreciates the problem that we all have.

There is much said about equity capital, much said about American dollars going back in to encourage American industry and the perpetuation of the great American system, and all that adds up to this one thing: That the money gathering, the capital-gathering mechanism must be preserved.

Now, I come to you as one who is not a professional regulator, not at all. I believe in regulation where regulation is necessary. I come to you as one who has held up his hand and sworn that he will administer a regulatory statute. I submit there is a difference. I say to you that I believe that no industry, whether it be the securities industry, the mercantile industry, the manufacturing, or whatever it might be—no industry has a monopoly on honesty. They all have their fringes, and so do we, and I am going to speak to you as "we", because I have been in the business, and I think I know something about some of the problems.

I think it behooves us—and I don't think I am talking out of turn when I say that I think it is becoming, and I believe that the industry has accepted honest, conscientious regulation, and that is where I come in. If I can add one little particle to conscientious common sense administration of the statutes that the Congress has enacted for the guiding posts of this industry, I shall be happy if I can serve in that capacity.

When Mr. Hooper called me and insisted that I come down and talk about the prospectus, I said, "You don't know what a hot chip you are asking for." I am aware that this is being taken down, and I am also aware that my view is not shared by some of my associates, and a great many of the staff.

What am I going to say tonight? I am going to pose some questions. I am not going to answer them. If you asked me to answer them, I would be more definite, but I know that you folks don't answer all the questions either. So I shall follow.

I prepared some remarks, and, when your President was kidding me a little bit from the Chair about making more notes, I was really cutting; maybe I will cut some more.

At any rate, the problem of the prospectus is really a very, very pertinent one to the industry, and I am going to give you just a few preliminary remarks and then go to the prospectus.

In a sense, this convention is a milestone of progress. Corporate executives, bankers, economists, analysts, and representatives of government have met to pool their information and interchange their ideas on broad problems of our economy. Both the range of subjects discussed and the topics themselves demonstrate that a good deal of informed thinking is taking place in the formation of modern investment policy. It is to the credit of The National Fed-

eration of Financial Analysts Societies that it has planned and provided this occasion, and I am proud of the opportunity to meet with you.

The keynote of the afternoon conferences of this convention was the word "outlook." Experts talked about the outlook for banking, for the auto industry, for chemicals, farm buying, petroleum, and the stock market. It was, to my mind, a happily chosen word. Outlook is based on insight, and insight in turn is based on information.

The patient accumulation of facts and the free interchange of ideas built our science and technology. Patient accumulation of facts and the free interchange of ideas are just as necessary if we are to develop workable ways of dealing with our problems as businessmen, administrators, and citizens. The further back we push the domain of ignorance, the nearer we approach the power to control—within a democratic framework—the technological and social forces which we must master in order to keep them from overpowering us.

The financial analyst may not pretend to an importance beyond his own field. But I think he has such importance. He is, at the same time, one of the causes and one of the products of our growing awareness of the need for information in dealing with modern business and investment problems. He is ever hungry for more particular and more extensive data. He is a perpetual reminder both to those who invest and those who create investments that there is a high premium on outlook and information, and that an informed view of the present is the best look at the future.

It is, I think, particularly fitting that a representative of the SEC should be addressing you tonight. The SEC is today the world's richest storehouse of financial information, and the financial analyst is one of the direct beneficiaries of that source of information.

Your objectives and ours are, in many ways, parallel. Out of the era of hunch, tip, and hysteria grew a set of Federal laws administered by the SEC, each of which was a major attack on the domain of ignorance. In these laws, Congress turned the light of information on the process of investment in new issues, on securities trading, and on the affairs of our giant public utility holding company systems, and on our investment companies.

The aim of the Congress in passing these laws, and our aim in enforcing them, is to protect the investor, and these laws are based on the same philosophy that underlies the profession of the financial analyst—that to be reliably informed is the first step in being protected.

The usefulness of a storehouse depends as much on what you can get out of it as on what goes into it. Of course, material filed with us is available for the public's inspection, and, as many of you know, we file many thousands of pages of fully copied material, but, because of our limited resources, we can collect, organize, and publish in the statistical form only a minute fraction of the information that is filed with us. I will describe a few of our publications, and, as I do, I think you will see that they are important tools of over-all financial and economic analysis.

We publish quarterly data on the working capital of United States corporations, showing principal items of current assets and current liabilities of domestic companies

and demonstrating at a glance the net current position of American corporate enterprise. Together with the Federal Trade Commission we publish the so-called Quarterly Industrial Financial Reports, which show, for many classifications of manufacturing companies, both aggregate and size-group estimates of balance sheets and income items. This is the only source I know of for a comprehensive look at significant financial estimates for these industrial groups.

In co-operation with the Department of Commerce we prepare and publish quarterly data on actual and proposed plant and equipment expenditures showing what business has spent and what it proposes to spend in coming periods on plant and equipment.

Of equal importance in measuring economic activity is our series on the volume and composition of individuals' savings, such as securities, cash, insurance, and durable consumer items.

Our findings and opinions in specific cases have been valuable tools of financial analysis. When I first came to the commission, I shared with many businessmen the belief that these findings and opinions were too long and complicated. If our commissioners had more time to devote to actual drafting, much could be done to shorten and simplify them. But there is good reason for their length in many cases. For our findings and opinions serve multiple purposes. In passing on plans of utility holding company reorganizations, we not only want to tell the people affected by the plan our reasons for holding the plan fair or unfair, but we also want the courts, which must also pass on these plans, to have before them explicit data and reasons for the commission's action. Further, these findings present facts about underlying system companies which have proven invaluable in accelerating the seasoning of newly distributed securities.

If the SEC were compared with a hospital and the financial analyst to a private physician, the services I have commented on until now are, so to speak, primarily our services to the profession. How about the patient himself—the investor?

Under our laws, the single most important vehicle intended to be of direct use to the investor is the prospectus covering securities registered for public offering under the Securities Act of 1933. Whether the prospectus is doing its job and what can be done to improve it are questions with which the SEC has wrestled for well over ten years.

The problem of the prospectus is not a simple one. Separate difficulties are presented in considering what it is and how it is to be used. Any satisfactory answer to those difficulties must take into account not only the basic function of the prospectus, which is to inform the buyer, but also the underwriting process itself—that process of which the prospectus has become, under the law, an integral part.

If a security is required to be registered under the Securities Act, it is unlawful to offer or solicit through the mails or facilities of interstate commerce before the registration statement becomes effective. When the statement does become effective, the first written solicitation is required to be the full statutory prospectus—which is, in most instances, the registration statement less the exhibits. With negligible exception, the term "prospectus" is so defined in the law that any communication in writing, or by radiobroadcast,

that attempts to dispose of a security is a prospectus, unless it is accompanied, or has been preceded, by a full statutory prospectus which complies with the requirements of the Act.

I should like to quote to you from the Act, Section 210 of the Securities Act of '33:

The term prospectus means any prospectus notice, circular, advertisement, letter, or communication, written or by radio, which offers any security for sale.

Thus selling literature other than the prospectus may be used only as long as it accompanies or is preceded by the statutory prospectus.

However, notwithstanding the fact that the prospectus is intended to be the first significant written communication that offers the security or solicits an offer, the law permits the prospectus to be withheld until the transaction is confirmed or the security is delivered.

These provisions create the setting of our problem. In a highly competitive and risky business, the law imposes a period during which the mails, or interstate facilities of communication, cannot be used to set up a distributing organization, or to solicit buyers' interest. When the registration statement is effective, offering can take place only by word of mouth, or at first through the full statutory prospectus.

What have all these restrictions added up to? Securities are sold by word of mouth; business is done by telephone. While the law condemns offering before registration is effective, the SEC encourages the dissemination of information, particularly to dealers, in a document that is a prospectus in everything but name, before registration is effective. I am referring to the so-called "red herring" prospectus. Except for institutional buyers who often insist on seeing the prospectus before they buy, customers are sold securities long before they ever see either a prospectus or any decent set of facts about the investment.

Some time later the investor sees a prospectus—a document which is often formidable and beyond his comprehension, and which amounts, under the circumstances, to showing him a menu after the dinner is over.

What have been the reactions to this situation?

1. Every proposal for the revision of this act, whether it has originated within or outside of the SEC, has carried with it a proposal to do away with a ban, or offering, or solicitation, before the registration statement became effective. It has been universally recognized that, for the protection of the investor, this restriction on offering has become an unnecessary limitation on the business which is highly competitive and risky, and which commitments naturally carry with them the pressure to take steps to measure anticipated demand and to cut down risk.

2. Every proposal to amend the law, whether arising from inside or outside the SEC, has included a proposal to liberalize the use of written offering material in addition to the prospectus. Although there have been disputes as to how far the law should go in permitting written offering material which did not amount to a prospectus, there has been agreement on the proposition that we should eliminate the present requirement that the prospectus be substantially the first piece of informative literature.

3. It has been recognized that the prospectus, in order to be useful to the average investor, needs streamlining; but it has been proposed to do the streamlining by Government fiat, and by dispensing official immunity for condensation. And it is still the view of many, with which I cannot agree, that the same document, the prospectus, should serve a combination of purposes, which, to my way of thinking, one document simply cannot be made to serve in many cases.

It is hoped that the document can be full enough to contain, in one package, all the material legal representations of the issuer and the distributors about the security, so that they can defend themselves against liability for misrepresentation or omission. Also, it is hoped that the document can be ample enough to satisfy the searching analysis which many institutions and financial advisers will want to give it. But, at the same time, this same document is intended to be a useful, streamlined piece of literature that will invite the lay investors' perusal and be simple enough to satisfy his capacity for absorbing information about the investment. What is the answer?

Mr. Hooper, who preceded me on this program, has commented on the problem of the prospectus in a recent issue of the *NEW YORK ANALYSTS JOURNAL*. His diagnosis coincides with that of others who have devoted their attention to this problem. In essence, Mr. Hooper has said that the prospectus is not serving its function of informing the lay investor, because it has come to be a legal document rather than an informative piece of selling material. He would preserve the prospectus because he agrees with many that the prospectus is useful to dealers, institutions, and professional analysts, and he has caught the essential point that the requirement of the disclosure itself effectively nips in the bud many schemes that would wither in the light of full disclosure. But he has expressed doubt whether any condensation of the prospectus pursuant to Government order would transfer it from a legal document into a useful adjunct to the distribution process, as far as the ordinary investor is concerned.

While he would preserve the prospectus in its present form as a useful tool for dealers, institutional investors, and financial analysts, he would give complete freedom to distributing houses to circulate selling literature, and he has suggested that the prospectus be available on request to anyone who thinks he can use it.

In sharp distinction to these views are the ideas of those who insist that we should still rely on the prospectus as we know it today, as the primary vehicle for information for all investors, and who think that the prospectus should be delivered to every buyer, whether lay or professional, at a given time before the sale.

This is a dispute in which it is easier to isolate the problems than to solve them. Suggestions such as those made on his own behalf by Mr. Hooper have the merit of flexibility and recognition of the practical problems faced by distributors. However, these suggestions raise certain difficult problems.

Many securities distributors do not want a system of unrestrained selling literature. They fear the constant pressure in this competitive business to stoop to the lowest level of their competitors. They welcome uniformity and restraint

in selling literature as the price of maintaining a high ethical level of business practice. They recognize that license in the use of selling literature may entail more stringent regulations than now exist, and perhaps make it more important than ever to give the prospectus to all customers as an assurance that a scrutinized document containing all the permissible representations has gotten to the buyer and will help to foreclose the possibility of suits in a falling market.

The truth may lie somewhere in between. Essentially, as I have indicated, the prospectus is, and must continue to remain, the place where the seller says all that the law requires him to say. It is, and should continue to be, the source from which the dealer, the institution, and the analyst can get the full information they want. It is not, to my mind, crucial as to whether or not the average investor shall get *this* document. Certainly, if he wants it, let him have it—and promptly. Certainly, if distributors' liability must depend on whether or not they have provided this document to investors, let them provide it.

What *is* crucial to the present issue is that the ordinary investor—the man for whom this law was passed—shall get something he can use and in time for it to be of use. We have a prospectus for the professional; why not try to achieve a prospectus for the public?

Disclosure is like the spinning of a generator—it yields no light until the current enters a circuit and is channeled into a bulb. As long as we try to make one document do three jobs, we cannot pretend that we have brought light to the investor merely by requiring that this document be prepared, distributed, or held available.

No amount of pious hoping will transform our lay investors into financial analysts. May I reread that sentence? No amount of pious hoping will transform our lay investors into financial analysts. There are some who think that, if we did no more than step up the time of the distribution process when the investor gets his prospectus, there would be better general use of the prospectus as we know it today.

There may be a lot to that. How much is a matter of great speculation. But it is certainly not speculation to believe that brevity invites reading, while bulk repels it; that a representation 90% accurate may as well not have been made, if it is going to be lost in a maze of qualifications

to achieve 100% accuracy; that a minutely detailed description of a funded pension plan, or elaborate footnotes on inventory valuations will not help the average investor to make any decision, except to throw up his hands in despair.

These are the real problems. How they will eventually be answered, I do not know. They may be answered only by an unremitting determination to find the best answers. It is to the credit of those who believe in the Securities Act and who have lived with its traditions that they have voluntarily undertaken to take a serious study of its operations and to consider methods of revision.

They cannot be expected to embrace, without extremely careful analysis—I must pause there for just a moment, because I come from the outside. I represent the outside viewpoint, and I think that that is the thought and the theory of commissioners. If it were only a question of saying yes to what the staff said, you wouldn't need the commission, because we have a staff who, in themselves, are expertly trained. They know the problems; they are definitely gifted with great understanding, but commissions are supposed to represent the outside, the public viewpoint.

May I say this in their defense: The staff cannot be expected to embrace, without careful analysis, proposals for revision of a law that has been the keystone of our Federal system of securities regulation. On the other hand, the honest securities distributor is expected to believe in his own merchandise and in his own potentialities of service to the investor, and to emphasize the practical difficulties encountered in complying with the regulations.

It is my sincere hope that in this give and take we will be able to find the answers soon. It is in this area that the financial analyst can be of extraordinary service. To the extent that the financial analyst is professionally devoted to the ideal of more and better information, to the extent that he has no axe to grind for the securities distributor, and to the extent that he has no stake in any given system of regulation, he can bring to these problems a valuable, independent point of view.

We would certainly, at the commission, welcome any help which you or your Society, and the benefit of your experience, might bring to us. I thank you very much.

(The audience rose and applauded.)

* * *

Committee on Professional Ethics and Standards National Federation of Financial Analysts Societies

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Second Annual Report of Committee on Corporate Information

National Federation of Financial Analysts Societies

Committee on Corporate Information for 1950

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RUSSELL LAMON
Provident Trust Company
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EDWARD M. SPENCER
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Detroit

THE TIME HAS COME to measure the year's accomplishments of the Committee on Corporate Information. A year ago, March 8, 1949, to be exact, the Committee made its initial report. Last year's report presented the problem faced by the security analyst in obtaining adequate and continuing information from corporations. The report outlined the functions of the committee and its proposed activities. This year the report will review our progress and describe our efforts in meeting this ambitious program. We will indicate both the encouragements and the difficulties encountered.

The committee is composed of senior analysts drawn from diverse investment backgrounds as well as representing the different cities that are members of the National Federation. The work of the committee has been carried on both through concerted action and in a decentralized manner with each member working individually within his own area.

It would be unrealistic for the committee to claim any great credit for the general improvement in company annual reports, in the greater completeness of information presented, or in the improved co-operation evidenced in personal contact work between corporations and analysts. The trend of the times is moving in our direction. The committee does claim credit for giving publicity to the problem and feels in certain specific instances that it has made a very important contribution.

The committee, a year ago, set forth its objectives. In this report we shall cover briefly the specific work done to meet each of these objectives. In several cases the problem has been delegated to a subcommittee. A report of one of these subcommittees is appended. The specific objectives follow:

1. Act as a clearing house for suggestions for companies on deficiencies in reporting for all analysts and bring these suggestions to the attention of corporation officials.

The committee had hoped that the individual analyst, having complaints and comments on corporations, would pass them on through the committee in the belief that the prestige of the committee representing the various analysts societies that were members of the National Federation would carry more weight than any single individual. Analysts are, if nothing else, individualists, and apparently they have preferred to deal directly with corporations themselves rather than pass their gripes along through the committee. The committee continues to welcome the complaints of analysts and is ready to deliver them to management.

2. Conduct a campaign of enlightenment among corporation officials.

The initial report of the committee has been delivered to an extended list of corporation officials including top policy making officers of all important corporations in the country. The report was mailed out or delivered in most cases with a personal letter from a member of the committee. The response to this letter was enthusiastic and virtually, without

exception, extremely co-operative. The committee is convinced that management is as anxious as the individual analyst to try to perfect all means of communication with shareholders; and management, in increasing numbers, is realizing the importance of the analyst in this connection.

Quotations from typical responses to our letter follow:

Assistant treasurer of a well-known farm equipment company in the Middle West . . . Important strides have, in my judgment, been made, in the matter of providing timely, accurate, and complete information to stockholders. We should like to assure you and the members of your organization that we are actively engaged in seeking to develop means of continuing improvement.

Treasurer of a leading chain grocery company in the East . . . If at any time you or any of your members have any suggestions, particularly with respect to our annual report and its make-up, we, of course, would be very appreciative if you would pass them on to us. We are entirely in accord with the policies and objectives of your Committee.

Vice-president of an international airline . . . We are in sympathy with your belief that there is need for an improvement in the volume and type of information supplied and wish you success in your attempts to improve the existing situation.

Comptroller of a printing and publishing company . . . I found the report very interesting and I was very much impressed with the steps outlined to meet the problems with which you are faced. I shall be glad to spend some time with you to get your ideas as to how the financial reports can be improved.

Treasurer of a large department store chain . . . I hope you will continue to keep us informed of your activities, and it is going to be nice from our end to know that when we see a problem of general interest that there will be a place to submit it for investor and stockholder reaction.

Director of a tobacco company . . . If you have any suggestions to make at any time, we shall be only too happy to hear from you.

President of a well-known gas and electric company in the East . . . The report seems to conform with the opinions we have held for some time, namely, that it is well for corporations and analysts to co-operate to the end that both parties benefit.

Treasurer of a wholesale drug company . . . I found it very interesting and agree with you that this committee can perform a real and needed function.

President of a well-known gas and electric company in the Middle West . . . in general, I agree with the report.

3. Attempt to develop standards of completeness in annual and quarterly reports.

This is no easy problem. The committee appointed several subcommittees of experts in various industrial fields to

work on the "ideal" annual report. The first problem was to get the experts to agree. This proved practically impossible. Any report must be in part subjective and reflect the particular thinking and methods of approach of the individual or group preparing the report. One of the subcommittees was given the task of examining the annual reports of the leading companies in the chemical industry and preparing a study covering the deficiencies in the 1948 reports and as a corollary setting up an ideal report. How close the companies came to this theoretical target will not be surprising to analysts but should be enlightening to company management. The report of this subcommittee is attached to Appendix B. In submitting this report, we wish to point out the difficulties in arriving at an ideal. What is essential information this year may prove to be unimportant in ensuing years, and we all realize that the accounting profession has not yet achieved any standardization in so far as it applies to industrial concerns.

In furtherance of objective no. 3, standards of completeness in annual and quarterly reports, members of the committee have personally called on top corporation officials and have urged changes in the company's annual reports with a view to improving them from an analyst's standpoint. While we do not intend, in this report, to single out any individual companies and to name them as being co-operative or unco-operative, we wish to call to your attention the fact that certain companies in the insurance field responded to the suggestions of committee members and enlarged or improved their annual reports, while others in the field completely ignored the suggestions. On the other hand, although insurance company managements cling to the traditional form, they were persuaded in a number of cases to release a brief interim report which certainly can be counted as a step in the right direction.

4. Include suggestions on field trips, direct interviews, etc.

The committee on several occasions during the year has conferred with corporation officials and has given them the benefit of our experience. The committee and all analysts can take pride in the knowledge that some of the most important corporations in the country have sought our suggestions. Among these include one of the most important public utility companies in the country; a large and well-known industrial enterprise that is coming out from under a holding company setup in accordance with SEC requirements; several leading utility companies in various sections of the country; and a well-known textile company. In some cases the suggestions of our committee have been adopted by the company in toto. These suggestions included a series of informal off-the-record luncheons for analysts attended by the corporation's top management; the preparation and distribution of more complete statistics on the company; and field trips to the company's plants. In other cases, the committee has recommended that the corporation appoint an official qualified to meet analysts and empowered to answer their questions.

5. Improve the availability of such report forms as 10-K's that are not now easily accessible outside of New York City.

The committee has communicated with the appropriate Government agencies urging that 10-K's be more generally accessible. The committee reports that the suggestion has been acknowledged but no progress toward acceptance of the objective.

6. Co-operation with appropriate committees from both the New York Stock Exchange and the SEC.

The New York Stock Exchange committees have been attentive to the suggestions of this committee. In recent months, the Stock Exchange attitude on this question has become slightly more receptive as a result of the move by several member firms in opening stockholder relations department. The committee will continue to co-operate with the Stock Exchange.

The committee is gratified to report that excellent success has resulted from mutual co-operative efforts between the Monsanto management and members of the committee and other security analysts, resulting in a much improved Monsanto annual statement. For that matter, the 1949 statement of Monsanto is one of the best, if not the best report your committee has so far had an opportunity to study. Mr. H. Kelsea Moore, who prepared the subcommittee report, scores it at 90 compared with 59 for the 1948 report.

Several members from the Monsanto management, on their own initiative, consulted with members of your committee and other analysts as to the deficiencies that existed in previous annual reports and what features should be added and what changes should be made. The committee cordially invites inquiries from other management who would like appraisal and assistance on preparation of annual reports.

The efforts of the committee have not been without disappointments. Some managements have shown a marked disinterest in requests for additional information. It appears that company officials have a tendency to hide behind certain stock cliches when they are seeking excuses for not making available more information for stockholders and financial analysts. These excuses follow the same general form, as follows:

1. The release of such information would hurt their competitive position.

2. Data requested is misleading.

3. It would not be proper to give such information to a limited group of stockholders without releasing it to all stockholders.

The committee feels that these excuses are usually invalid for most types of information, and it will continue to combat vigorously such objections wherever they are pursued by corporation officials.

The committee will continue to strive to meet the objective outlined. The committee wishes to enlist the co-operation and interests of all analysts. We hope that even wider publicity will be given to our efforts.

COMMITTEE FOR 1949

BARNARD FLAXMAN

JOSEPH M. GALANIS

JEREMY C. JENKS, *Secretary*

RUSSELL LAMON

ARTHUR J. O'HARA

E. LINWOOD SAVAGE, JR.

KENNARD WOODWORTH, *Chairman*

I wish to take this opportunity to thank all the members of this committee for their co-operation and for their enthusiasm.

Respectfully submitted

KENNARD WOODWORTH, *Chairman*
March 12, 1950

Book Reviews

THE SCIENTIFIC APPRAISAL OF MANAGEMENT

Jackson Martindell

Harper Brothers, 300 pp, \$4

One of the most important requirements for the success of any corporation lies in the worth of its management. Just how to appraise management is shown in Mr. Martindell's book. Here the developments of companies now well established are used as examples and guides. And it is stressed that failures often arise from "mismanagement."

A chart well worth study illustrates ideal corporate structure and the functions of each department. Organization plays a tremendous part in allocation of authority and the general well-being and smooth running of corporations. Just who makes the decisions and how they are carried out are often disregarded but are of extreme significance. A great difference exists between creation and management which on occasion makes the men who had sufficient vision to bring the corporation into being and start it on the road of success poor guides for the established going concern. For this reason the structure and ability of the entire board must be evaluated. A vital question to be considered is the real point of authority, and another the product division of the organization. One of the most meaningful chapters describes principles of excellent management.

It should be remembered that the stockholder is not the manager but the "residual legatee" with no real claim for but merely hope of dividends. Dividends come from that which is left over after the companies' needs for productive uses are met. Even when a surplus has been established, it becomes necessary to maintain these funds for possible eventualities. Intelligent direction of dividend policies is the cornerstone of continued payment.

INVESTMENTS

George W. Dowrie and Douglas R. Fuller

John Wiley & Sons, 611 pp, \$5

In this second and greatly enlarged edition of "Investments" is found virtually everything needed for the understanding of investment technique. Methods, values, and sources of information will be appreciated by those less seasoned by

years of unaided research. In addition to the text there are fine bibliographies at the end of chapters.

Government impact on investment is twofold. First, there is an attempt to protect securities' buyers from exploitation; second, an impact of tax levies which fall heavily on investment profits. On the one hand has come a series of protective legislation and so-called blue-sky laws, and on the other Federal regulations and taxes. It is especially on the portfolios of large holders of securities that the tax burden has fallen heaviest.

Risks are noted, and cyclical fluctuations as well as price changes induced by wars and other causes are discussed. Considerations of the most favorable buying or selling positions are gone into in detail. This is an all-inclusive work on every phase of investment, full of facts, in which sources for the complete data on most questions may be found.

In this department are summarized books, articles, and documents of outstanding economic or financial interest. A list of articles, which may be useful to the security analyst, follows the reviews.

Helen Slade is the author of the book reviews. She will co-operate with members of the Society desiring source material for JOURNAL articles and for research projects and studies.

STATISTICAL YEARBOOK 1948 OF THE UNITED NATIONS

\$1.50

This is prepared by the Statistical Office of the United Nations and is to be printed annually under the name of the "United Nations Statistical Yearbook." It covers time series of the various countries from 1928 to 1948. Index numbers for purposes of international comparability have been recalculated to the base of 1937 = 100. Population, areas, and density for each country are presented by tables, as is manpower, employment, manufactured output, mining, and agricultural production. Tables on new building, electric energy, prices, and all manufacturing as accomplished by the different countries are factors for appraising the extent of demands on the United States. This book may be had at the United Nations or at Columbia University.

TAXABLE AND BUSINESS INCOME

Don Throop Smith and J. Keith Butters

National Bureau of Economic Research

342 pp, \$4

An unerring mark of the high quality of any accounting study is the endorsement of George Oliver May. In the introduction to this book he traces and defines concepts of book profits and taxable income. In part 1 the emphasis is on book profits and statutory net income. Part 2 considers the "components of net income" with considerable stress on depreciation charges for tax or book intent.

Starting with the railroads, regulatory power has been bestowed on Federal Commissions. In 1933 and 1934 Securities Acts "conferred jurisdiction over accounting of other corporations whose securities are required to be registered." Thus developed codes of legal rules determining income distinguishable from general accounting practice. Increasing numbers of provisions have modified the general concept of income, which is especially true of rules governing deductions for depletion.

Depletion accounting variations have brought about some singular differences between taxable and business income. Here the ideas expressed in depletion entries are often unlike. They deviate all the way from ignoring depletion on company books to taking full account of the special provisions in tax laws. Yet very rarely is it suggested that total earnings before depletion be regarded as income. At times problems lie in differentiating between allowances based on concepts of income and deductions based on policy. "The continued disallowance for tax purposes of deductions for surplus reserves seems probable in view of the latitude within which opinions may differ concerning the need for and size of such reserves."

Book profits and statutory income have on the whole not differed greatly, and book profits usually exceed statutory net income by less than 10%, although in some mining and public utilities companies the spread is far greater. Most of these large divergencies are thought to have been the result of differences in depletion and depreciation accounting.

It was likewise noted that deductions for tax purposes or surplus often represent amounts that should be included in income. Discrepancies between book figures and tax figures of debt expense can arise from the practice of carrying large or unusual charges of credits directly to surplus and not through the income account. The basis of property as an integral part of value is thoroughly explained. Analysts interested in this type

*All Government publications may be found in the New York Public Library, economics department, room 228.

of consideration and those who deem it important in profit analysis will welcome the opportunity to read so stimulating and excellent a study. Tables and charts do much to illustrate comparisons for the thoughtful reader.

to students of business and general economic questions. To the analysts, particular interest lies in the chapters concerning electricity and gas, resources, transportation, construction, and manufacturing.

per car came to 51,000. The estimate of new-car prospects for 1949, 1950, and 1951 was 11,730,000, and these mostly from present car owners. A large proportion of buyers have reached decisions as to the makes wanted. They hope to purchase Chevrolet (43.2% of the buyers), Ford (23.4%), Plymouth (20%), Pontiac (17.8%), and Buick (17.8%). These figures sometimes include first and second choice. The main reasons for these selections are low maintenance cost, economical price, and previous ownership. Only 8% of the tires on cars driven under 20,000 miles have been replaced. Highest in favor among the tires are Goodyear (26%), Firestone (20%), U. S. Royal (12%), and Goodrich (10%). Field interviews for this survey were conducted by Crossley, Inc.

THE ECONOMIC ALMANAC FOR 1950

Conference Board

In this tenth edition of the Economic Almanac over one hundred new tables largely concerned with manufacturing, savings, national income, and other subjects closely related to the consideration of changes in the business picture have been added. All information compiled by the Conference Board is of course reliable and should be of tremendous value

AUTOMOBILE AND TIRE INDUSTRIES

Ray Robinson

Two Crowell Collier studies under the direction of Ray Robinson, chief of research, are sufficiently replete with facts to be well worth examining. There is a diminishing family demand for new cars, although a sufficient number to absorb the on-hand supply. As of September 1, 1949, "car-owning homes" constituted 71% of the population. The average total mileage

* * *

Committee on Placement

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We hope members will aid the placement committee of the National Federation of Financial Analysts Societies to serve persons seeking employment. We ask that persons who know of openings contact us and that firms avail themselves of our lists before filling vacancies. Will analysts who are willing to change their locale please notify their local placement committee chairman?

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JOSEPH M. GALANIS	Shields & Company New York
F. W. ELLIOTT FARR	Girard Trust Company Philadelphia

Recent Books, Documents, and Magazine Articles of Financial Interest*

Monetary and Fiscal Subjects

- The Federal Budget, *Conference Board Business Record*, Feb 1950.
- International Banking Section, *Statist* (London), Dec 17, 1949.
- Credit Policy and Economic Stability (Federal Reserve System), *Economic Conditions*, Jan 1950.
- The Dollar Position of Latin America, *Monthly Review Federal Reserve Bank of New York*, Feb 1950.
- Answer to a Gold Standard Critic, *Commercial & Financial Chronicle*, Jan 12, 1950.
- The Financing of Highways by Counties and Local Rural Governments, 1931-1941, Supt. of Documents, U. S. Dept. of Commerce.
- Canadian Gold Mining Industry Recovering, *Barron's*, Dec 26, 1949.
- After Devaluation, *Foreign Affairs*, Jan 1950.
- Pounds, Dollars, and Ourselves, *Survey*, Dec 1949.
- Trends in British Banking, *Burroughs Clearing House*, Feb 1950.
- Act Relating to Banking and for Other Purposes, Australia, no. 57, Acts 1947.
- Average Interest Rates on All Mortgage Loans, *Real Estate Analyst*, Dec 1949.
- Monthly Bank Range of Prices on the New York Stock Exchange during 1949, *Commercial & Financial Chronicle*, Jan 19, 1950.
- Good Year for Bankers: Interest Rates Went Down in 1949, *Business Week*, Jan 21, 1950.
- What Is the Most Important Credit Problem for 1950?, *Credit World*, Jan-Feb-Mar 1950.
- The Sterling Problem, *Lloyds Bank Review*, Nov 1949.
- Devaluation and the Monetary Conditions of Today, *Credit Financial Management*, Jan 1950.

Economics and Miscellaneous

- Final Report of the United Nations Economic Survey Mission for the Middle East, Columbia University Press, \$1.
- Business Highlights, *Conference Board Business Record*, Jan 1950.
- Price of Construction to Stay near Peak, *U. S. News*, Jan 13, 1950.
- Corporate Donations in 1948, *Conference Board Business Record*, Jan 19, 1950.
- Consumer Income and Saving, 1945-49, *Monthly Labor Review*, Dec 1949.
- Review and Outlook, 1950, *Federal Reserve Bank of St. Louis*, Jan 1950.
- Buying Power of the Dollar, *U. S. News*, Jan 1950.
- The South Shows Greatest Growth, *Sales Management*, Jan 15, 1950.
- Economic Bulletin for Europe*, United Nations, third quarter, 1949.
- Dams Are Not Enough, *American Forests*, Jan-Feb 1950.
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- Significance of the "General Price Level" and Related Influences to American Agriculture, *Journal of Farm Economics*, Nov 1949.
- Brewery Share Outlook (British Companies), *Economist* (London), Dec 31, 1949.
- The Related Movements of Prices and Failures, *Duns Review*, Jan-Feb 1950.

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Taxes

- Tax Equality Is Coming, *Credit Financial Management*, Nov 1949.
- Tax Cuts Will Help Government and Business, *Commercial & Financial Chronicle*, Dec 22, 1949.
- The Responsibility of the Tax Advisor, *Harvard Law Review*, Jan 1950.
- Target, Taxes, *Forbes*, Jan 1950.
- Tax Problems in Real Estate Operations, *N. Y. Certified Public Accountant*, Jan 1950.
- Act to Provide Raising Public Revenue by Imposition of a Privilege Tax Relative to Natural Gas, Mississippi State Laws, ch. 256, 1948.
- Income Tax Decisions of 1949, *Certified Public Accountant*, Jan 20, 1950.
- Assessment Procedures in Rural New York, *Cornell Extension Bulletin*, 760.
- California Tax Systems, *Tax Digest*, Nov 1949.
- Property Tax Assessment in Imperial County, Calif. State Board of Equalization, Sacramento, Calif.

Industrial Subjects

- Cement Basic Industrial Data, National Industrial Conference Board, 1950.
- Iron and Steel Basic Industrial Data, National Industrial Conference Board, 1950.
- Magnesium Metal and Compounds, National Industrial Conference Board, 1950.
- Chain's Modernization Hits New High, *Chain Store Age*, Jan 1950.
- Electrical Appliance Production Statistics, *Radio & Television Retailing*, Jan 1950.
- Consumption of Food in the United States, 1909-48, Supt. of Documents, Dept. of Agriculture, misc. pub. 691, Aug 1949.
- Furniture Manufacturers See End of Sales Slump, *Barron's*, Jan. 9, 1950.
- These Old and New Cars on the Road, *Conference Board Business Record*, Jan 1950.
- Electric Expansion to Slacken, Natural Gas Speeded, *Barron's*, Jan 16, 1950.
- Why People Buy a Certain Brand of Coffee, *Advertising Agency*, Jan 1950.
- Chemical Age Year Book*, Chemical Age, 1950.
- These African Copper Mines, Livingstone Press, London.
- Oil & Petroleum Year Book*, W. E. Skinner, London.
- Frozen Foods Spout New Growth, *Food Industries*, Jan 1950.
- Memorandum on the Rayon Industry, Morgan Stanley, N. Y.
- Changing Geography of the U. S. Shoe Industry, *Leather & Shoes*, Dec 3, 1949.
- Texas University College of Business Research Chart Book of Texas Business in 1949.
- Belgian Coal Reorganization, *Economist* (London), Jan 7, 1950.
- Too Much Steel: National Production Program, *Economist* (London), Jan 7, 1950.
- Have Carpets Hit the Ceiling?, *Business Week*, Jan 21, 1950.
- Flax (Fiber and Flaxseed) an Important Crop in Several Areas of Western United States, *Foreign Trade*, Jan 7, 1950.
- The Import Picture (Liquor Industry), *Spirits*, Jan 1950.
- Quest for More Revenue from Lower Volume of Traffic Called Unhealthy by ICC, *Railway Age*, Jan 21, 1950.

*All articles and documents listed in this section may be found in the economics division, room 228, of the New York Public Library.

Membership Directory Changes

Changes in Address—Jan 9 to Mar 24, 1950

(New Address Only Shown Below)

- | | |
|--|--|
| ABBE, Richard F.
Wertheim & Co., 120 Broadway, N. Y. 5 | LUSSEY, Harry W.
Wm. E. Pollock & Co., 20 Pine St., N. Y. 5 |
| ADAMS, Mark I.
Walston, Hoffman & Goodwin, 35 Wall St., N. Y. 5 | MACURDA, Donald B.
First Boston Corp., 100 Broadway, N. Y. 5 |
| DIETZ, Kenneth F.
Baker, Weeks & Harden, 1 Wall St., N. Y. 5 | NELSON, Frank Kinloch
Arthur Wiesenberger & Co., 61 Broadway, N. Y. 6 |
| EICHHORN, Harold
Kalb, Voorhis & Co., 25 Broad St., N. Y. 5 | NEWSOME, John C.
J. C. Newsome & Co., 120 Broadway, N. Y. 5 |
| GOODSELL, John
Empire Trust Co., 120 Broadway, N. Y. 15 | OGILVIE, Robert J.
Wellington Fund, 1420 Walnut St., Philadelphia 2 |
| GREEN, William P.
Hentz & Co., 60 Beaver St., N. Y. 4 | SCHAFFER, Arthur G.
R. W. Pressprich & Co., 68 William St., N. Y. 5 |
| HARPER, William B.
American Petroleum Institute,
50 West 50th St., N. Y. 20 | TERWILLIGER, David L.
58 Sutter St., San Francisco 4 |
| HASENOEHRL, Victor F.
Export Import Bank, Washington 25, D. C. | TEVRIZ, Edward H.
Room 1935, 40 Wall St., N. Y. 5 |
| HUGUENIN, Arthur N.
L. S. Jackson & Co.,
132 St. James St., Montreal, Canada | VAN ECK, John C., Jr.
Steckler & Moore, 120 Broadway, N. Y. 5 |
| JAEGER, Leonard H.
Southern Co., 20 Pine St., N. Y. 5 | |
| KEITHLEY, John M.
R. W. Pressprich & Co., 68 William St., N. Y. 5 | |
| KESSLER, Ethel M.
Montgomery, Scott & Co., 120 Broadway, N. Y. 5 | |

Resigned

- BAILEY, Kennedy B.
BRUSH, Waite S.

Admissions to NYSSA Membership

NOVEMBER 8, 1949 TO JANUARY 25, 1950

- | | |
|---|---|
| BAÇON, Caroline Dawdy, Reis & Chandler, 30 Vesey St.,
New York | KOCSIS, E. J., Guaranty Trust Co., of N. Y.,
140 Broadway, New York |
| BECK, T. Edmund, Beck, Mack & Oliver, 522 Fifth Ave.,
New York | LAMBOURNE, Richard W., Dodge & Cox,
1711 Mills Tower, San Francisco |
| COLBY, Gerald S., duPont, Homsey & Co., 31 Milk St.,
Boston | McINERNEY, John W., Wood, Walker & Co.,
63 Wall St., New York |
| GREEN, Harry C., Hardy & Co., 30 Broad St., New York | MUELLER, Carl E. W., Irving Trust Co., 1 Wall St.,
New York |
| GREENWALD, Paul, Geyer & Co., 63 Wall St., New York | MURPHY, Paul A., Oglebey Norton & Co.,
1200 Hanna Bldg., Cleveland, Ohio |
| HALLINGBY, Paul, Jr., E. F. Hutton & Co.,
61 Broadway, New York | PUGH, Edward C., Central YMCA, 55 Hanson Pl., B'klyn. |
| HEUERMANN, Hugo, Chemical Bank & Trust Co.,
165 Broadway, New York | REMICK, Robert Merrick, Jr., Investors Counsel,
29 Broadway, New York |
| HILL, Kenneth E., Chase National Bank, 18 Pine St.,
New York | RITTER, Albert F., American Electric Securities Corp.,
20 Pine St., New York |
| KANE, Richard A., Manhattan Research Associates,
48 Wall St., New York | SWANBERG, Edmund R., Scudder, Stevens & Clark,
1 Wall St., New York |
| KANE, W. Sheridan, Guenther Publishing Corp.,
86 Trinity Pl., New York | WOODRUFF, Alling, Management Planning of Washing-
ton, 20 Pine St., New York |
| KLEIN, Jeanne H., Reis & Chandler, 30 Vesey St.,
New York | ZINK, Montague Hamilton, E. F. Hutton & Co.,
61 Broadway, New York |

Luncheon Forum Talks

NEW YORK SOCIETY OF SECURITY ANALYSTS

SINCE JANUARY 24, 1950

<i>Date</i>	<i>Speaker</i>	<i>Topic</i>
Jan 26	W. W. Sebald President of corporation C. R. Hook Chairman of corporation H. H. Tullis Vice-president and comptroller	Armco Steel Corp.
Jan 30	W. Paul Jones President of company	Servel, Inc.
Feb 2	Roscoe Seybold Vice-president of corporation	Westinghouse Electric Corp.
Feb 3	Dr. A. B. DuMont President of company	Allen B. DuMont Laboratories
Feb 6	Curtis Barkes Assistant to president, finance and property	United Air Lines
Feb 8	Lyle McDonald Vice-president of company	Public Service Electric & Gas Co.
Feb 9	Ben Dale Cook Senior partner, B. D. Cook & Partners, Ltd., London	Anglo-American Security
Feb 15	J. V. Toner President and general manager	Boston Edison Co.
Feb. 21	Henry K. Norton Trustee of railroad	New York, Susquehanna & Western R.R.
Feb 23	J. M. Bartlett Assistant vice-president	Brunswick-Balke-Collender Co.
Feb 24	W. C. Beckjord President of company	Cincinnati Gas & Electric Co.
Mar 1	Paul Kayser President of company	El Paso Natural Gas Co.
Mar 3	R. A. O'Connor President of company	Magnavox Co.
Mar 10	William White President of railroad	Delaware, Lackawanna & Western R.R.
Mar 13	Louis Rieben President of company	Tung-Sol Lamp Works
Mar 14	J. E. McKeen President of company	Chas. Pfizer & Co.
Mar 15	M. L. Hibbard President and general manager	Minnesota Power & Light Co.
Mar 17	W. J. Tuohy President of company	Chesapeake & Ohio Railway Co.
Mar 20	E. M. Morris Chairman of company	Associates Investment Co.
Mar 21	R. G. Fairburn President of company	Diamond Match Co.
Mar 22	N. C. McGowen President of corporation	United Gas Corp.
Mar 23	J. Cameron Thomson President Northwest Bancorporation, chairman tax committee of CED	The 1950 U. S. Tax Program— Northwest Bancorporation
Mar 24	P. G. Blazer Chairman of company	Ashland Oil & Refining Co.
Mar 27	G. M. Gadsby President and general manager	Utah Power & Light Co.
Mar 28	K. S. Adams President of company	Phillips Petroleum Co.
Mar 29	Donald C. Cook Commissioner Introduced by: Morris Kaplan Assistant director of public utility division, U. S. Security & Exchange Commission	Some Comments on the Current Utility Scene
Mar 31	Max McGraw President of company	McGraw Electric Co.
Apr 5	E. R. Acker President and general manager	Central Hudson Gas & Electric Corp.

Facts from our 1949 Report

SALES and net income were the second largest in our history, exceeded only by the record year 1948.

OUR 1949 BUSINESS, in large part, moved against a declining trend in the forefront of the year in the clock and watch industry. Some of our best known products are still on allocation.

MARKETS for General Time products—whether clocks for the home or timing devices for industry—are constantly expanding . . . keeping pace with the growth in population, new housing and factory developments.

WIDE PRICE RANGE—from \$2.25 to \$295—is covered by General Time's equally wide range of clocks and watches.

THREE YEARS AT A GLANCE

	1949	1948	1947
Sales.....	\$31,740,110	\$34,600,324	\$30,295,022
Net Income.....	2,471,352	3,291,838	2,047,808
Working Capital.....	12,798,061	11,922,197	10,379,292
Book Value Per Common Share.....	\$43.27*	\$39.30*	\$32.60*
Earnings Per Common Share.....	5.74*	7.70*	4.62*

*Based on 402,607 common shares outstanding after payment of stock dividends declared in December 1948 and 1949.

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Annual Report 1949



THE CHASE NATIONAL BANK

OF THE CITY OF NEW YORK

STATEMENT OF CONDITION, MARCH 31, 1950

RESOURCES

Cash and Due from Banks	\$1,200,710,221.24
U. S. Government Obligations.	1,655,931,638.17
State and Municipal Securities	171,728,672.20
Other Securities	125,300,747.93
Mortgages	32,734,062.73
Loans	1,379,484,664.53
Accrued Interest Receivable	10,523,711.75
Customers' Acceptance Liability	16,593,906.63
Banking Houses	29,237,975.25
Other Assets	11,192,097.82
	<u>\$4,633,437,698.25</u>

LIABILITIES

Deposits	\$4,224,989,652.25
Dividend Payable May 1, 1950	2,960,000.00
Reserves—Taxes and Expenses	14,513,444.14
Other Liabilities	25,976,256.27
Acceptances Outstanding	21,470,965.60
<i>Less: In Portfolio</i>	4,184,261.42
Capital Funds:	
Capital Stock.	\$111,000,000.00
(7,400,000 Shares—\$15 Par)	
Surplus	189,000,000.00
Undivided Profits	<u>47,711,641.41</u>
	347,711,641.41
	<u>\$4,633,437,698.25</u>

United States Government and other securities carried at \$324,271,292.00 were pledged to secure public and trust deposits and for other purposes as required or permitted by law.

Member Federal Deposit Insurance Corporation